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ABSTRACT

The document is a summary of the Missouri State Comprehensive Outdoor Recreation Plan, which was designed to provide guidelines for allocation of resources for needed recreation facilities. The plan identifies the present and future needs for outdoor recreation and recommends ways of meeting these needs. This 1967 document provides a brief history of the State of Missouri and its climate, population, geography, and economy. Also included are climatic maps, tables of demographic statistics, and results of an outdoor recreation survey of Missouri's public and private recreation facilities and the activities performed therein. Supply and demand graphs are also provided. (EL)

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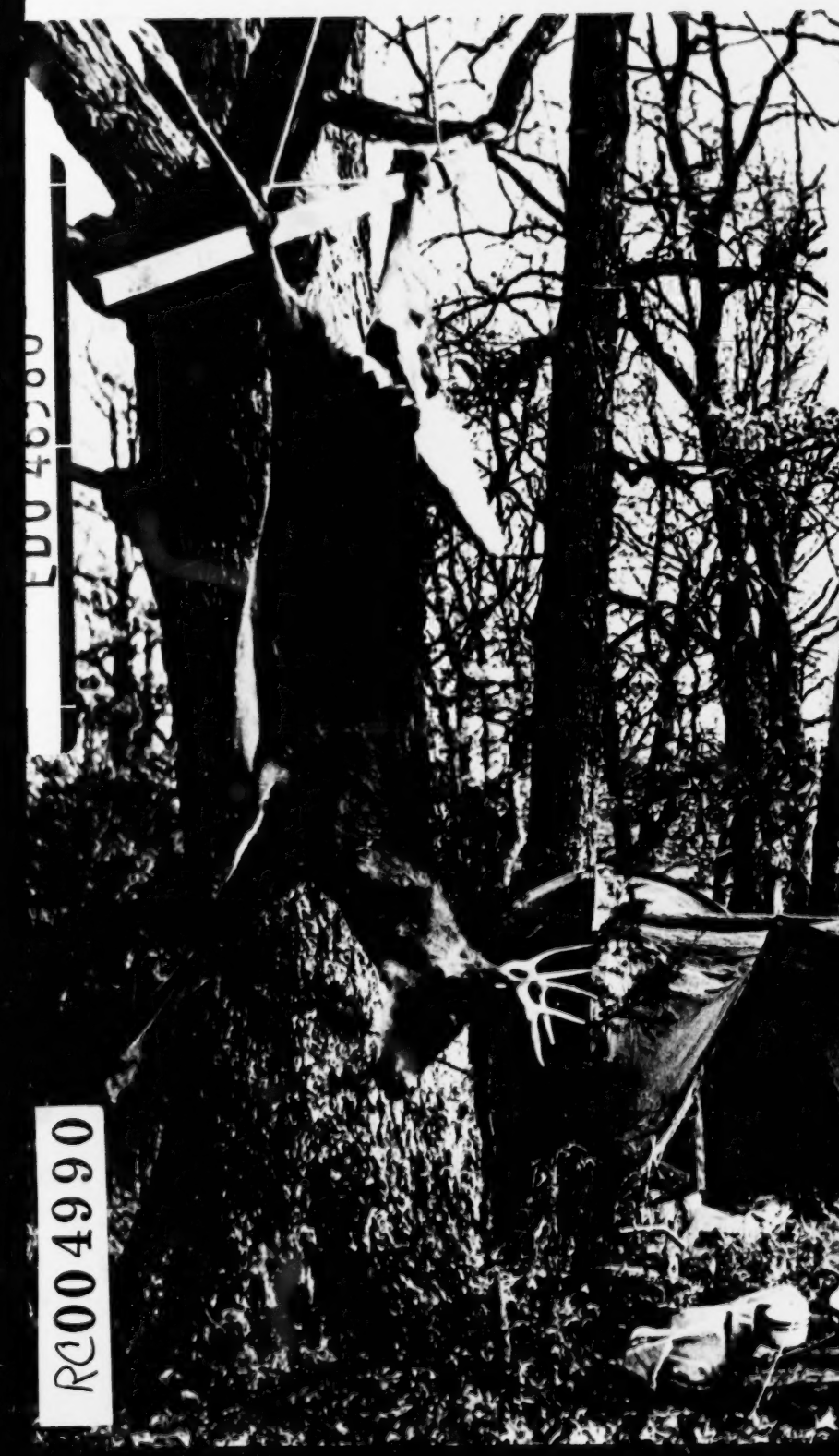
Executive Summary

Missouri Comprehensive Outdoor Recreation Plan



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March 28, 1967

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The Honorable Warren E. Hearnes
Governor of Missouri
Executive Office
State Capitol Building
Jefferson City, Missouri

Dear Governor Hearnes:

It is our pleasure to transmit the Missouri State Comprehensive Outdoor Recreation Plan for your review and consideration. The Plan consists of three volumes along with three volumes of the Statistical Summary. One volume of the Executive Summary of the Plan also is provided.

The Plan is just what the title indicates, the statewide comprehensive outdoor recreation plan for Missouri. It indentifies the present and future needs for outdoor recreation and recommends ways and means of meeting these needs.

The Plan is a big step in the accelerated efforts to meet the outdoor recreation needs of Missourians as well as our visitors from out of state.

We take pride in forwarding it to you.

Sincerely yours,

Joseph Jaeger, Jr.
Chairman

Robert L. Dunkeson
Robert L. Dunkeson
Executive Secretary

JJ/RLD/gn

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EXECUTIVE SUMMARY

Missouri Comprehensive Outdoor Recreation Plan

MRI Project No. 2962-D

BOR Project No. 24-00077

April 1, 1967

Midwest Research Institute
425 Volker Boulevard, Kansas City, Missouri 64110

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INTRODUCTION AND SUMMARY

PURPOSE OF THE PLAN

The major purpose of the Missouri Comprehensive Outdoor Recreation Plan is to provide guidelines for the allocation of funds and resources for needed recreation facilities. This Plan was prepared under the auspices of the State of Missouri with financial assistance from the Land and Water Conservation Fund Act of 1965.

SCOPE OF THE PLAN

The Plan includes a complete inventory of public and private recreation areas and their facilities in the state, along with the results of a comprehensive survey of 3,674 Missouri family units concerning demand for principal outdoor recreation activities. From these data, recreation facilities needs--by recreation activity, by county, by recreation region, and for the state, as a whole--were identified and projected for 1965, 1980, 2000, and 2020.

SUMMARY OF THE FINDINGS

Available Resources. At present, there are 3,069 recreation areas in the State of Missouri; most are small, having less than 10 acres available for recreation activities. But in the state, as a whole, there are over 2.8 million acres devoted to recreation. About 59,000 of these acres are "developed"--with swimming pools, playfields, picnic grounds, and the like. More than half of the 3,069 recreation areas have surface water within their boundaries; about 44 percent have accessible adjacent water areas. The potential supply of recreation facilities in the state is very large. Over 300 areas were identified during the course of the Inventory as having development potential for recreation purposes. Included are the Corps of Engineers' water resource developments, the Lewis and Clark Trail area, and the Great River Road area. Moreover, more than 80 planned private recreation developments were mentioned by local government agencies and landowners during the course of the recreation survey.

Demand. Present and future recreation demands, measured in terms of 30 different recreation activities, were developed for the population of the state. The demand analysis included breakdowns by type of activity, participant, and recreation region. The most popular recreation activities for the state were:

THE SETTING

HISTORY

Missouri's ancient history is difficult to trace. Only vestiges of Indian culture remain. And although the Indian mounds suggest that Missouri has been inhabited for thousands of years by man, its rich and fertile land lay dormant until the 18th Century. Then, three immigrant cultures from the old world followed each other in succession and unlocked the land's true potential and promise.

First were the French Canadians who settled Ste. Genevieve and St. Louis in the mid-1700's. The Spanish ruled Missouri for 31 years (1771-1802), but even under their administration, English-speaking people--hardy log cabin pioneers--entered the area under Spanish encouragement to bolster the population and to tame the land. In 1804 the American flag was raised in St. Louis, soon after the lands of the lower Missouri became U.S. property under the Louisiana Purchase: France, after a brief one-year rule, sold the territory to the United States in 1803 for $15 million.

From 1804 to 1821, the year Missouri became a state, Missourians moved up-river to settle the land. The Lewis and Clark expedition set out in 1804 from St. Louis--the first extensive exploration of the northwestern part of the new territory. Missourians fought the Fox and Sauk Indians in this period--the only serious encounters with Indians in Missouri. Missourians formed the first representative assemblies--an elective lower house in 1812, an elective upper house four years later. And after petitioning for statehood, they elected Thomas Hart Benton senator in 1820--Missouri's most distinguished early statesman who was the state's eloquent voice in Congress for 30 years.

Missouri, the Union's 24th state, joined the United States as a slave state under the Missouri Compromise but, in its subsequent development, it tended toward the free-state pattern--largely because large plantations, typically associated with the Deep South, were lacking, and the slave population remained small.

By then Missouri had become the gateway to the West. From staging points in Independence and Westport (now a part of Kansas City) vigorous...lusty...enterprising...pious...fortune-seeking...land-hungry...adventurous Americans set out in search of America's manifest destiny--along the famous overland trails to Santa Fe, Oregon, and golden California. Missourians exported men to

Texas in large numbers in the mid-1800's to fight in the Mexican War. The Mormons came during this period to Independence and settled. It was from here that a part of these hardy peoples set out for Utah, while a large complement remains in the Independence area to this day.

In 1859, the iron horse caught up with the steamboat. America's technological tendrils, the rails, reached across the state with the completion of the Hannibal and St. Joseph railway. In Missouri, as elsewhere, an industrializing North and an agrarian South met and collided. War was only a few years away.

Missouri as a state fought on the Union side. And although the people opposed secession--their special convention, called in 1861, voted against it 80 to 1--the state's leadership was dominated by a Southern aristocracy. Governor Claiborne F. Jackson opposed the Union with militia elements and had to be driven from Jefferson City by federal troops before the people's convention could elect a leader--Hamilton R. Gamble--more representative of their feelings.

Although the majority had voted for the Union--and sent more than 100,000 men to fight for the United States--the population was genuinely split on the issues of the war: 50,000 men donned Confederate grey, a uniform which they felt best clothed their convictions.

War--and some 1,100 battles and engagements fought in the state--left Missouri deeply in debt. But its industrious people recoverd what had been lost. Rails were extended. The discovery of rich zinc and lead deposits in southwest Missouri spurred the economy. After 1880, development of the southwestern parts of the United States contributed to the rapid growth of Kansas City, thus establishing the second great metropolis of the state astride the Missouri River. Although the state suffered economic losses in the panic of 1893, Missouri's industrial development has forged ahead at a steady rate since 1900. Today Missouri can boast of a strong and fast-growing economy, based principally on manufacturing and agriculture, a population now exceeding 4.5 million, and some of the nation's most beautiful and varied playgrounds--western prairies, the rugged Ozarks, the soft delta lands of the Deep South, a myriad of lakes, scenic caves, woodlands, rivers, streams, and state parks.

Yet, for all its turbulence, vigor, and accomplishments, Missouri's past appears to be but an indicator of a future equally rich, varied, and proud. The state's contribution to American culture has been significant, and great men continue to emerge from Missouri into national reknown. Its famous (and infamous) men are familiar to Americans anywhere--among them George Washington Carver, Mark Twain, Jesse James, General Pershing, President Truman, General Omar Bradley, General Taylor, Senator Benton, and his grandson, Thomas Hart Benton, the internationally known painter who has immortalized his native state in canvasses glowing with discordant hues of color.

Missouri past and future merge into its present--colored by a heritage of enterprise and struggle, a history where North met South, the East met the West...Missouri promises much to its future generations--and those who come to the "Show-Me" state to wash away their cares on its lakes, woodlands, mountains, and streams.

CLIMATE

Missouri is located in the Central Plains Area, which is characterized by a warm, temperate climate (Figures 1 and 2).[1/] The average annual temperature is between 50 and 60 degrees. Average January temperatures range from 25 degrees in most of the state, to the 40's in the Bootheel region. In July, the temperatures throughout the state normally fall into the 75 to 80 degree range. The Central Ozarks region has the distinction of holding both the highest and lowest temperatures recorded in the state--115 degrees and -40 degrees.

Average annual precipitation (Figure 3) ranges from about 35 inches in the northwest corner of the state to over 50 inches in the Bootheel region. During the primary recreation season, from April through September, the northwest portion of the state averages 22 inches of rain; the Bootheel region, 30 inches. Average annual snowfall ranges up to over 20 inches in the northern part of the state.

Relative humidity (Figure 4) is moderate--ranging from 45 to 55 percent--and the state averages at least 160 clear days each year. And during June, July, and August, Missourians can expect 10 to 11 hours of sunshine each day.

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[1]Figures and tables are located at the end of this section.

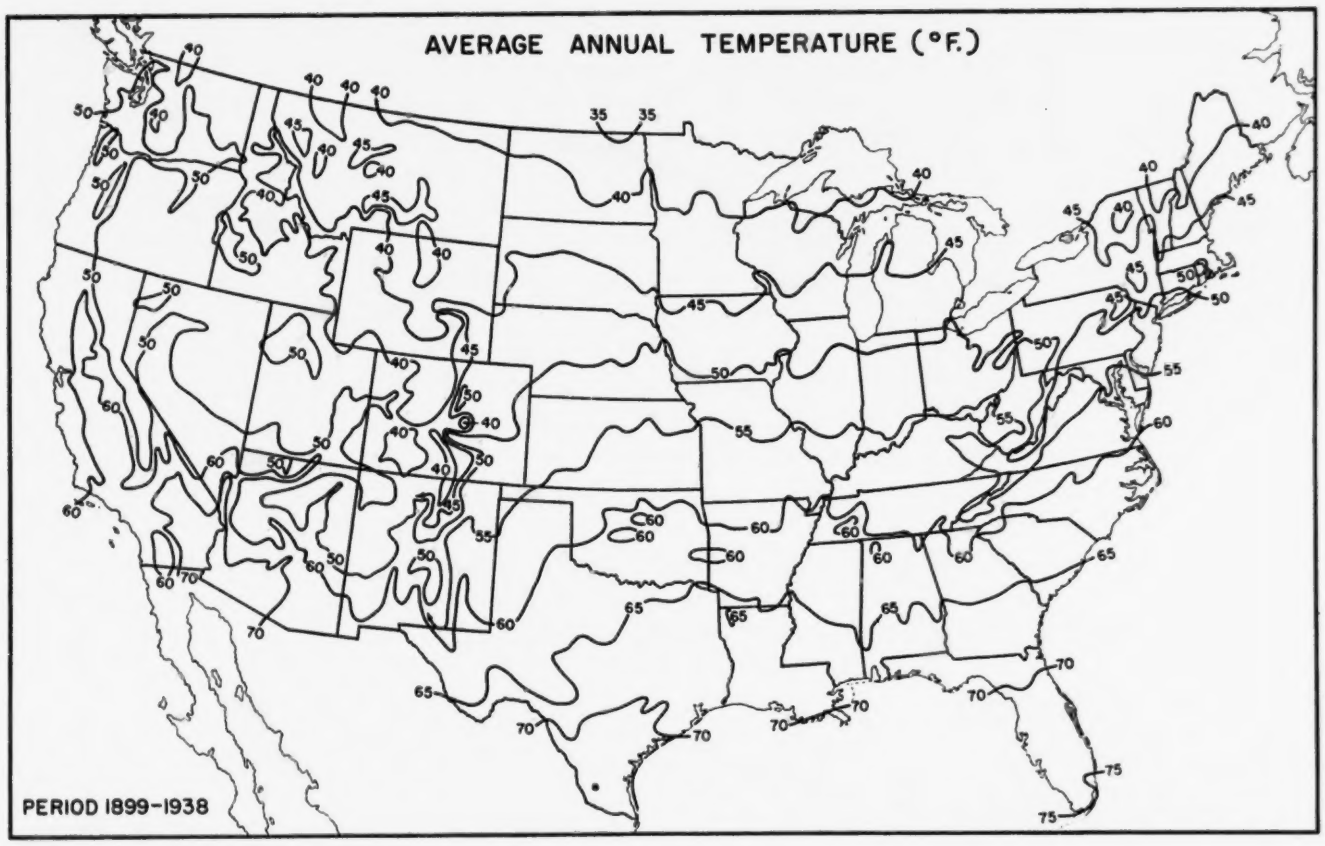


Figure I

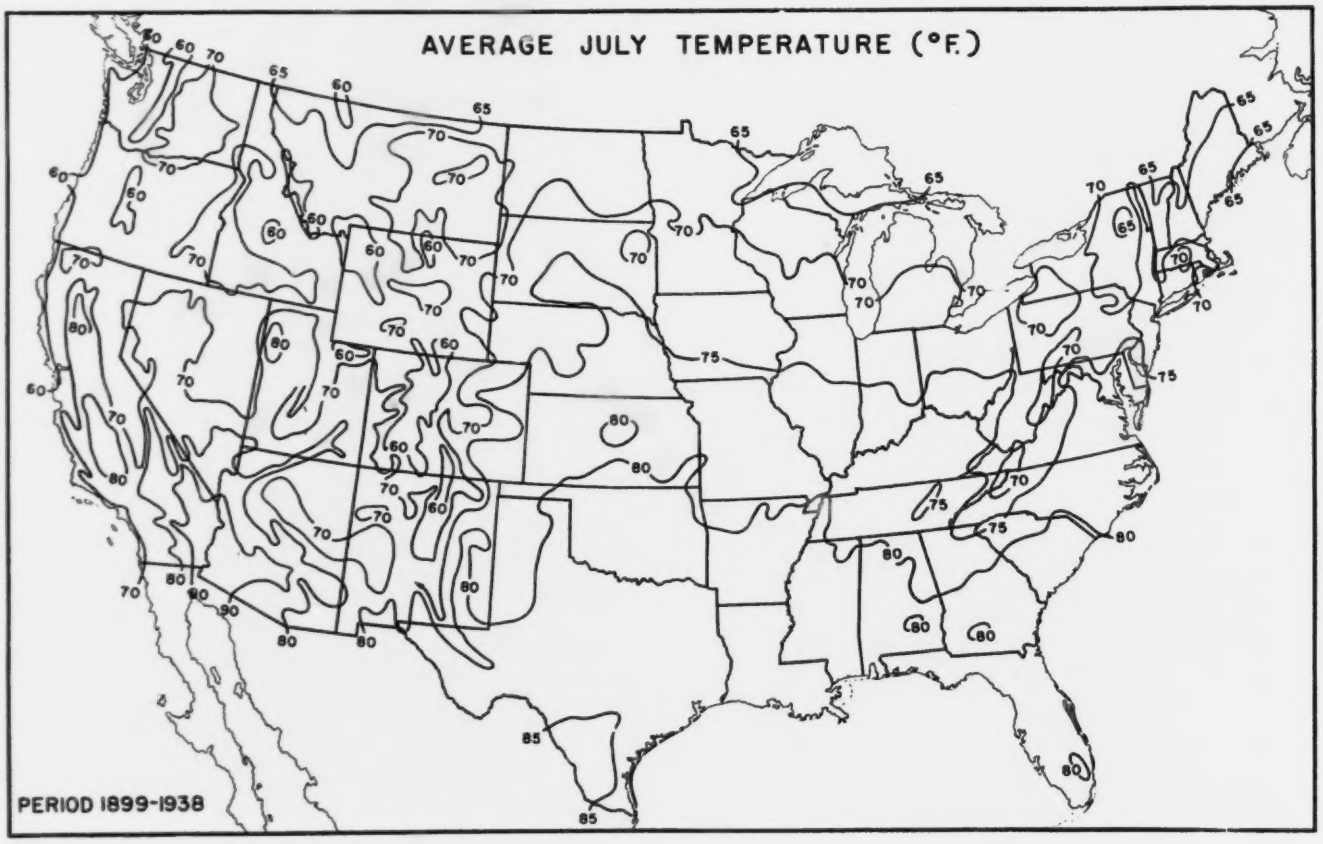
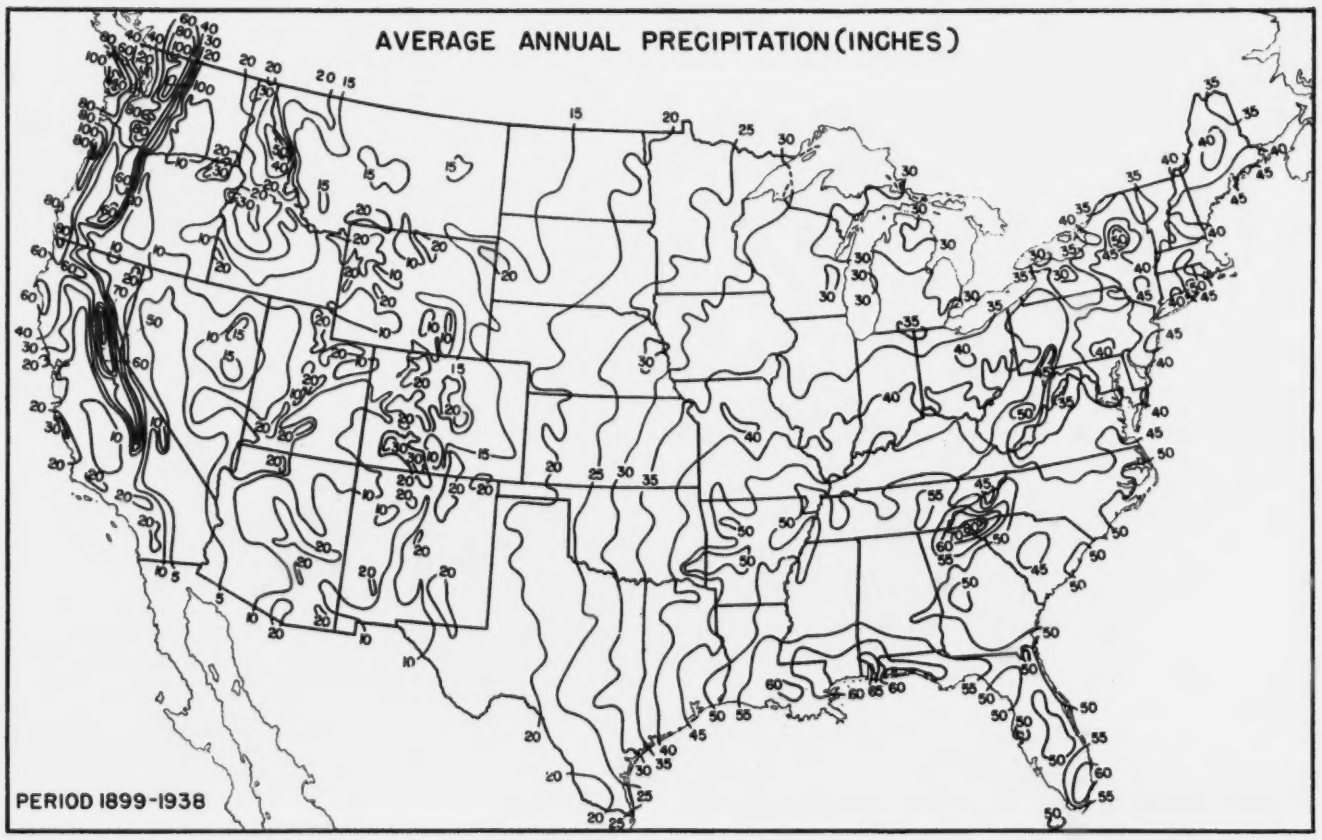


Figure 2



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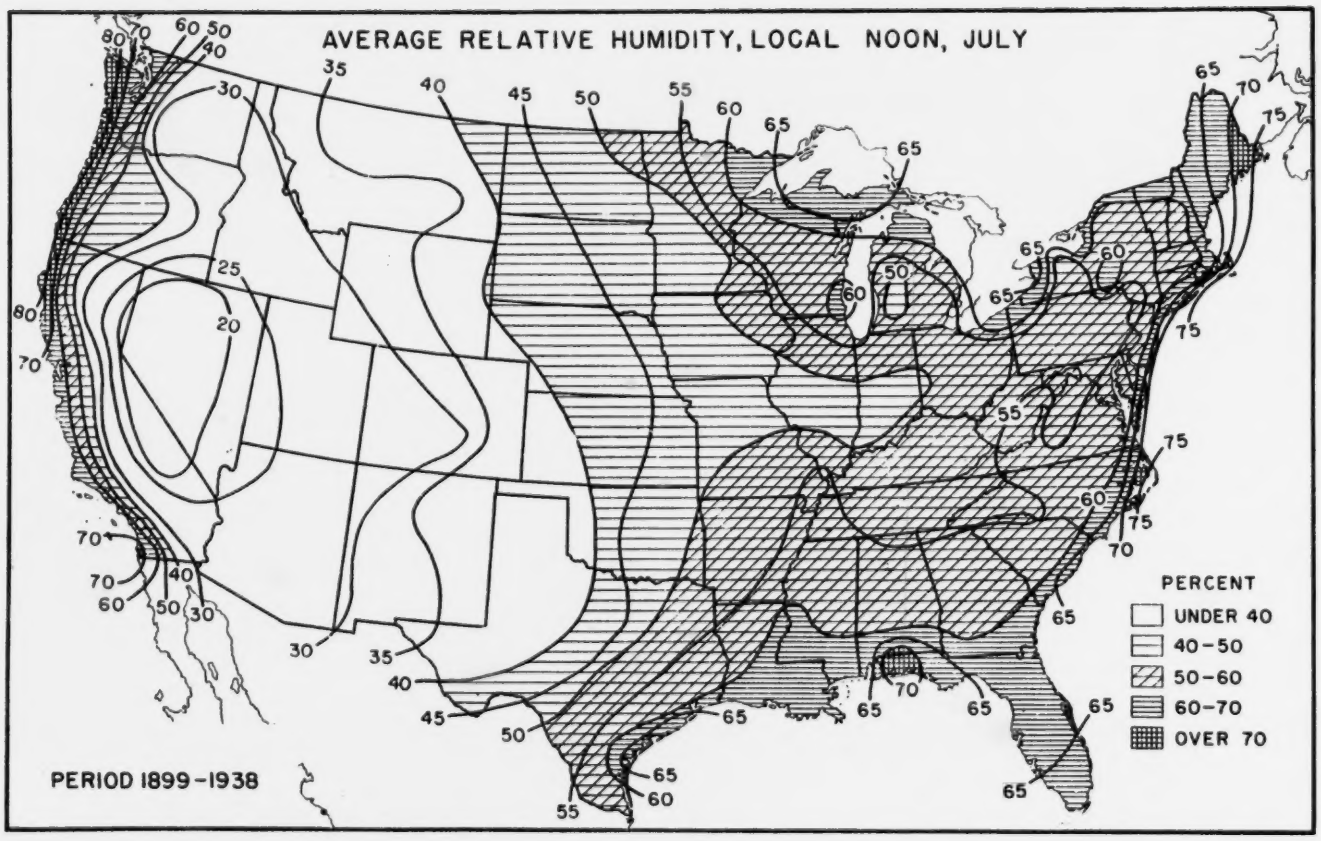

AVERAGE RELATIVE HUMIDITY, LOCAL NOON, JULY
PERIOD 1899-1938
PERCENT
UNDER 40
40-50
50-60
60-70
OVER 70

Figure 4

TABLE I

1950-1960 POPULATION COMPARISONS: UNITED STATES, WEST NORTH CENTRAL REGION AND STATES

	1950				1960			
	Population	Percent Urban	Percent Rural	Number of Persons/Sq Mi	Population	Percent Urban	Percent Rural	Number of Persons/Sq Mi
United States	151,326,000	64.0	36.0	42.6	176,323,000	69.9	30.1	50.5
West North Central	14,061,000	52.0	48.0	27.5	15,394,000	58.8	41.2	30.2
Minnesota	2,982,000	54.5	45.5	37.3	3,414,000	62.1	37.9	42.7
Iowa	2,621,000	47.7	52.3	46.8	2,758,000	53.1	46.9	49.2
Missouri	3,955,000	61.5	38.5	57.1	4,320,000	66.6	33.4	62.5
North Dakota	620,000	26.6	73.4	8.8	632,000	35.2	64.8	9.1
South Dakota	653,000	33.2	66.8	8.5	681,000	39.3	60.7	8.9
Nebraska	1,326,000	46.9	53.1	17.3	1,411,000	54.3	45.7	18.4
Kansas	1,905,000	52.1	47.9	23.2	2,179,000	61.0	39.0	26.6

Source: U.S. Bureau of the Census, Statistical Abstract of the United States, 1964 (85th Edition), No. 9. pp. 12, 13, No. 11, p. 16.

TABLE II

POPULATION PROJECTIONS FOR 14 RECREATION REGIONS IN MISSOURI
1980, 2000, AND 2020

Region	1980	2000	2020
1. Pony Express Territory	146,721	142,283	138,361
2. Green Hills Region	63,593	58,723	54,574
3. Mark Twain Region	121,063	112,800	105,590
4. Kansas City Area	1,225,750	1,684,000	2,181,000
5. Old Trails Area	156,896	172,273	172,345
6. Daniel Boone Region	158,244	195,419	208,781
7. Land of the Osage	246,453	339,378	419,359
8. Lake of the Ozarks Country	93,090	112,614	117,085
9. Central Ozarks Region	141,062	147,876	147,494
10. Metropolitan St. Louis	2,324,000	3,291,000	3,963,000
11. White River Country	182,232	181,733	182,217
12. Big Springs Country	67,526	62,353	57,948
13. Old Settlement Playgrounds	136,146	142,994	143,924
14. Delta Area	126,371	116,689	108,448
Total	5,189,000*	6,760,000*	8,000,000

Source: Midwest Research Institute.
* Regional totals do not add to state total due to rounding.

Note: See recreation region map on page 17.

TABLE III

POPULATION: STANDARD METROPOLITAN STATISTICAL AREAS IN MISSOURI
(ST. LOUIS, KANSAS CITY, SPRINGFIELD, AND ST. JOSEPH)
1980-2000-2020

County	Area (Square Miles)	1980 Projected Pop.	1980 Pop. Per Sq. Mile	2000 Projected Pop.	2000 Pop. Per Sq. Mile	2020 Projected Pop.	2020 Pop. Per. Sq. Mile
St. Louis City	61	660,000	10,820	610,000	10,000	598,000	9,803
St. Louis County	497	1,275,000	2,565	1,900,000	3,823	2,200,000	4,426
Franklin County	932	77,000	83	140,000	150	260,000	279
Jefferson County	667	170,000	255	345,000	517	505,000	757
St. Charles County	561	142,000	253	296,000	528	400,000	713
St. Louis SMSA (Mo. only)	2,718	2,324,000	855	3,291,000	1,211	3,963,000	1,458
Jackson County	603	962,500	1,595	1,250,000	2,073	1,450,000	2,405
Clay County	413	152,250	369	216,000	523	305,000	738
Cass County	698	60,750	87	101,000	142	166,000	237
Platte County	420	50,250	120	117,000	279	260,000	619
K.C. SMSA (Mo. only)	2,134	1,225,750	574	1,684,000	789	2,181,000	1,022
Buchanan County (St. Joseph SMSA)	404	92,700	229	92,400	229	92,000	228
Greene County (Springfield SMSA)	677	176,700	261	274,970	406	359,500	531
St. Louis, Kansas City, St. Joseph, & Springfield SMSA Total	5,933	3,819,150	644	5,342,370	900	6,595,500	1,172
State Total	69,138	5,189,000	75	6,760,000	98	8,000,000	116
1960 SMSA Counties as a per cent of the State Total	8.58%	73.60%		79.03%		82.44%	

Source: Kansas City SMSA area population projections for 1980; Kansas City Studies 1964-1990, Community Renewal Report, December 1964, pp. 54, 57.
St. Louis SMSA area population projection for 1980: based on Bell Telephone Company projections.
All other projections and calculations are by Midwest Research Institute.

THE OUTDOOR RECREATION SURVEY

SOURCES OF INFORMATION

The 1966 Missouri Outdoor Recreation Survey was actually composed of a series of subordinated research efforts. It was prepared on the basis of:

* A comprehensive inventory of the recreation activities pursued by Missouri residents and out-of-state visitors,

* An inventory of recreation areas and their facilities available to residents and visitors alike,

* Extensive field interviewing in the state with private and public bodies,

* A special mail survey of financial institutions, and

* A comprehensive analysis of the literature on recreation and leisure.

METHODOLOGY

Since any study of this type demands techniques of measurement, a series of quantitative yardsticks were devised for gauging recreation "demand" and "supply"--with demand meaning the desire of the population for specific recreation activities (and the facilities that make these activities possible) and supply being the availability of facilities .

The 30 most popular recreation activities were identified and selected for analysis. Most of them are self-explanatory (bicycling, sailing, hunting, etc.). However, for a full definition of activities refer to the Appendix of this report.

For purposes of analysis, participation in any activity was measured in "activity occasions"--the active pursuit by an individual of an activity for a period of half an hour or more on any one day. Thus, for instance, two fishing trips by one man on the same day would be considered a single activity occasion. But if he went fishing on two subsequent days, two occasions would be recorded.

Recreation activity by the population was obtained by actual interview of 3,674 families, comprising 14,232 individuals. A sample was selected for each county, and a random sampling technique was used for maximum reliability. The activities of men, women, and children over 6 were separately obtained. All data were prepared for computer processing and correlation, based on a geographically-weighted allocation, by the income of the sampled family unit.

In order to obtain geographical correlations, data were aggregated into 14 recreation regional totals. Recreation regions conform largely to historically delineated regions (Figure 5).

The Missouri Recreation Survey was designed to establish demand for outdoor recreation of the local population on a state, county, and regional basis. Thus, the recreation demand shown in the Plan (and based on the Statistical Summary) is that of the local population. Out-of-state demand was calculated for the state as a whole and added to total local demand. A portion of the recreation demand of the local population is satisfied out of state. This was also estimated on a state-wide basis and subtracted from total demand.

The complete inventory of available recreation areas and their facilities was obtained by actual count and measurement. This information was gathered from a multiplicity of public and private sources and by field visits.

Comparison of demand and supply--to arrive at "need" or "idle capacity" figures--called for a unique approach to the measurement of recreation facility "capacity." The problems which had to be tackled by the investigators can be illustrated by asking: How many "fishing activity occasions" can a stream provide per mile?

Standards used to measure capacity are set forth in a later portion of this executive summary (Table XVII), and are further discussed in the detailed recreation plan. Comparisons were made by correlating demand factors and facility capacities by computer processing, for the state as a whole, for each recreation region, and each county. Out-of-state demand for facilities was not determined on a per county and per recreation region basis but was calculated for the state as a whole.

MISSOURI RECREATION REGIONS

I	Pony Express Territory
II	Green Hills Region
III	Mark Twain Region
IV	Kansas City Area
V	Old Trails Area
VI	Daniel Boone Region
VII	Land of the Osage
VIII	Lake of the Ozarks Country
IX	Central Ozarks Region
X	Metropolitan St. Louis
XI	White River Country
XII	Big Springs Country
XIII	Old Settlement Playgrounds
XIV	Delta Area

Figure 5

Source: Midwest Research Institute, Spring 1967.

THE DEMAND FOR OUTDOOR RECREATION

HOW MISSOURIANS PLAY

In 1965, Missourians participated in outdoor recreation about 608 million times. By far the greatest favorite among activities was the playing of outdoor games (163 million occasions), followed in turn by biking (135 million), walking for pleasure (63 million), pleasure driving (54 million) and swimming (52 million).

Total participation figures and preferences reveal the variable leisure time enjoyed by men, women, and children. For instance, on the average, the Missouri male participated in outdoor recreation activities 100 times during the year. His wife had occasion to participate 86 times. But children (between 6 and 19 years of age) played outdoors nearly two out of every three days--210 times.

"He" likes driving, walking, fishing, outdoor games, and sightseeing in that order, devoting 62 percent of his participation time to these relatively active pursuits. "She" prefers somewhat more passive outdoor fun, her favorite activities being walking, driving, sightseeing, swimming, and picnicking in that order, accounting for 57 percent of her outdoor recreation time expenditures. The children are most active. Games, biking, swimming, walking, and driving take up 90 percent of their recreation time.

Specific participation rates for adults and children, compared with national and regional rates measured in earlier surveys are presented in tabular and graphic form at the end of this section (Table IV, Figure 6).[1]

REGIONAL DIFFERENCES

The composite activity profile presented above does not reflect regional differences, which are considerable. The demand for recreation is a function of many factors, including health, age, income, education, sex, time available, degree of mobility, and distance from and availability of recreation resources. Regional variations in these and other factors are significant and tend to be reflected in the amount of time devoted to outdoor recreation and the type of activities which are pursued.

---

[1] Figures and tables are located at the end of this section.

On a recreation region basis, the following extreme ranges of participation rates were found:

	Highest Participation	Participation Rates	Lowest Participation	Participation Rates
All adults	Green Hills	144	Lake of Ozarks	57
Males	Mark Twain	158	Lake of Ozarks	63
Females	Green Hills	132	Lake of Ozarks	50
Children	Green Hills	351	Lake of Ozarks	81

In spite of the similar urban characteristics of the St. Louis and Kansas City areas--in terms of population concentration, income levels, etc.--their respective participation rates differed significantly:

	Participation Rates		Participation Rates
Kansas City		St. Louis	
All adults	101	All adults	86
Males	108	Males	91
Females	95	Females	81
Children	207	Children	211

Statistical tables following this section show, in detail, specific participation rates for all regions and preferences for particular activities (Tables V, VI, VII, VIII). Also summarized are findings dealing with barriers to participation cited by the respondents and their views on three techniques of financing recreational facilities--user fees, a tax levy, and federal admission pass (Figures 7 and 8).

FUTURE DEMAND

One significant purpose of this research effort was to determine future demand for recreation in Missouri. This determination presented difficulties: The 1966 survey was the first comprehensive survey of recreation demand in Missouri, and specific prediction requires data for at least two points in time. A Missouri recreation survey in 1970 would provide the tools for a more precise prediction. Our forecasts were based on an assumption that participation in outdoor recreation in Missouri will increase by a factor of 1.5 by 1980 measured from a 1965 base and that corresponding

factors for the years 2000 and 2020 would be 2.0 and 2.5, respectively. The predictions conform closely to Outdoor Recreation Resources Review Commission figures, which assumed 2.28 times more recreation activity in 2000 than had been measured in 1960. Detailed projections appear at the end of this section in Table IX.

OUT-OF-STATE DEMAND

Of the total demand for outdoor recreation in Missouri, nearly 13 percent is represented by out-of-state visitors. In terms of participation occasions, residents accounted for nearly 608 million occasions, visitors for 77 million. Visitors spent more than $462 million in the state for all items including transportation. This picture, however, must be balanced by the fact that Missouri residents also satisfied some of their demand for outdoor recreation in other states.

Non-resident visitors are either vacationers--who spend more than two days in the state--or tourists en route who stay for shorter periods. On a total man-days basis, 18 million visitors to the state spent nearly 31 million days in Missouri. Detailed breakdowns by visitor state of origin are presented in tabular and graphic form at the end of this section (Tables X and XI, Figures 9 and 10). Information on out-of-state visitors was developed by the Missouri Division of Commerce and Industrial Development, based on an annual tourist survey.

Illinois, Kansas, California, Texas, Iowa, Oklahoma, Indiana, Ohio, Michigan, and Arizona--in that order--were the 10 states which sent the most visitors to Missouri. In terms of time spent in the state, these states also ranked highest, although their order of ranking was somewhat different.

Only the visitors from three states among the top 10 spent more than an average of two days in the state: Arizona, California, and Iowa. The leading 10 states accounted for nearly 74 percent of all tourists and 72 percent of all man-days of visits.

How did the visitors amuse themselves? An answer is provided by Table XII. Drawn from the 1964 Missouri Tourist Survey (and extended to 1965), it shows preferred activities in categories slightly different from those used in other parts of this report. The top five activities were sightseeing, visiting parks, visiting historical sites, photography, and swimming.

The average visitor participated in more than two activities daily during any one day spent in Missouri--or 70.7 million activity occasions in 1964 and 77.3 million occasions in 1965. The increase between 1964 and 1965--almost 11 percent--is substantial and reflects the growing attractiveness of Missouri vacation lands and recreation opportunities. (The out-of-county and out-of-state visitor and his activities were not included in the computerized calculations of recreation demand and need by county.)

TABLE IV

DEMAND FOR OUTDOOR RECREATION
COMPARATIVE TABLE OF RECREATION PARTICIPATION RATES BY MAJOR ACTIVITIES
MISSOURI RECREATION SURVEY, 1966 versus NATIONAL RECREATION SURVEY, 1960-1961

	Missouri Recreation Survey, 1966 by Age Groups and Sex State as a Whole				National Recreation Survey--All Ages, 1960-1961	
	20 Years and Over			6 Through 19 Inclusive	Total Population All Ages National Data	Total Population All Ages North Central Census Region Data
Activities	Adult Male	Adult Female	Adults	Children		
Biking	1.1	1.2	1.1	64.2	5.15	4.98
Horseback Riding	0.9	0.5	0.7	2.9	1.25	1.08
Playing Games	10.3	5.7	7.9	71.1	12.71	11.68
Fishing	10.4	5.0	7.6	4.6	4.19	4.01
Canoeing	0.2	0.1	0.2	0.2	0.12	0.13
Sailing	0.1	0.1	0.1	0.1	0.11	0.07
Other Boating	3.5	2.5	3.0	1.8	1.95	2.21
Swimming	6.5	6.4	6.5	18.9	6.47	5.34
Water Skiing	1.0	0.7	0.8	0.7	0.41	0.27
Hunting Small Game	3.8	0.2	1.9	0.8	--	--
Hunting Big Game	0.3	0.0	0.2	0.0	1.86 all hunting	1.79 all hunting
Hunting Waterfowl	0.6	0.0	0.3	0.1	--	--
Camping--Trailer	0.5	0.4	0.4	0.3	--	--
Camping--Tent	1.0	0.8	0.9	1.0	0.86 all camping	0.65 all camping
Camping--Group	0.1	0.1	0.1	0.3	--	--
Mounting Climbing	0.0	0.0	0.0	0.0	0.09	0.05
Hiking	0.3	0.4	0.4	0.5	0.42	0.35
Walking for Pleasure	16.7	20.1	18.5	12.5	17.93	16.08
Bird Watching	2.4	3.5	3.0	0.7	--	--
Wildlife Photography	0.2	0.1	0.1	0.0	--	--
Nature Walks	1.0	1.0	1.0	0.9	2.70	2.42
Picnics	6.5	6.3	6.4	4.9	3.53	3.64
Driving for Pleasure	16.9	16.5	16.7	9.8	20.73	21.32
Sightseeing	7.8	7.9	7.9	4.2	5.91	6.64
Attending Sport Events	6.6	4.8	5.7	5.6	3.75	3.61
Attending Concerts	1.1	1.1	1.1	0.6	0.39	0.34
Ice Skating	0.3	0.3	0.3	1.0	0.55	0.99
Snow Skiing	0.0	0.0	0.0	0.0	0.07	0.07
Sledding and Tobogganning	0.2	0.2	0.2	2.9	0.51	0.46
Other	0.0	0.1	0.1	0.1	--	--
	100.3	86.0	92.9	210.8	107.24	104.52

Source: Missouri Recreation Survey, 1966. Outdoor Recreation Resources Review Commission (ORRRC), National Recreation Survey, 1960-1961, data published in the OUTDOOR RECREATION FOR AMERICA, G.P.O., Washington, D. C., 1962, p. 212.

Note: Missouri Recreation Survey is based on a stratified random sampling of 3,674 families in the State of Missouri with 6,979 adults and 7,253 children 6 years and over (see Statistical Summary, Vol. 1, p. 4). The ORRRC National Recreation Survey is based on a random survey of 15,609 persons, 12 years and over, distributed into four major U.S. Census Regions. The Missouri sample size of 14,232 persons, 6 years and over, compares very favorably with the ORRRC sample size (see ORRRC Report No. 19, p. 105).
Hunting was not divided into categories in the ORRRC National Recreation Survey as in Missouri. The same is true for camping. Bird watching, wildlife photography and other categories were not used in the ORRRC survey.

RECREATION ACTIVITIES IN MISSOURI

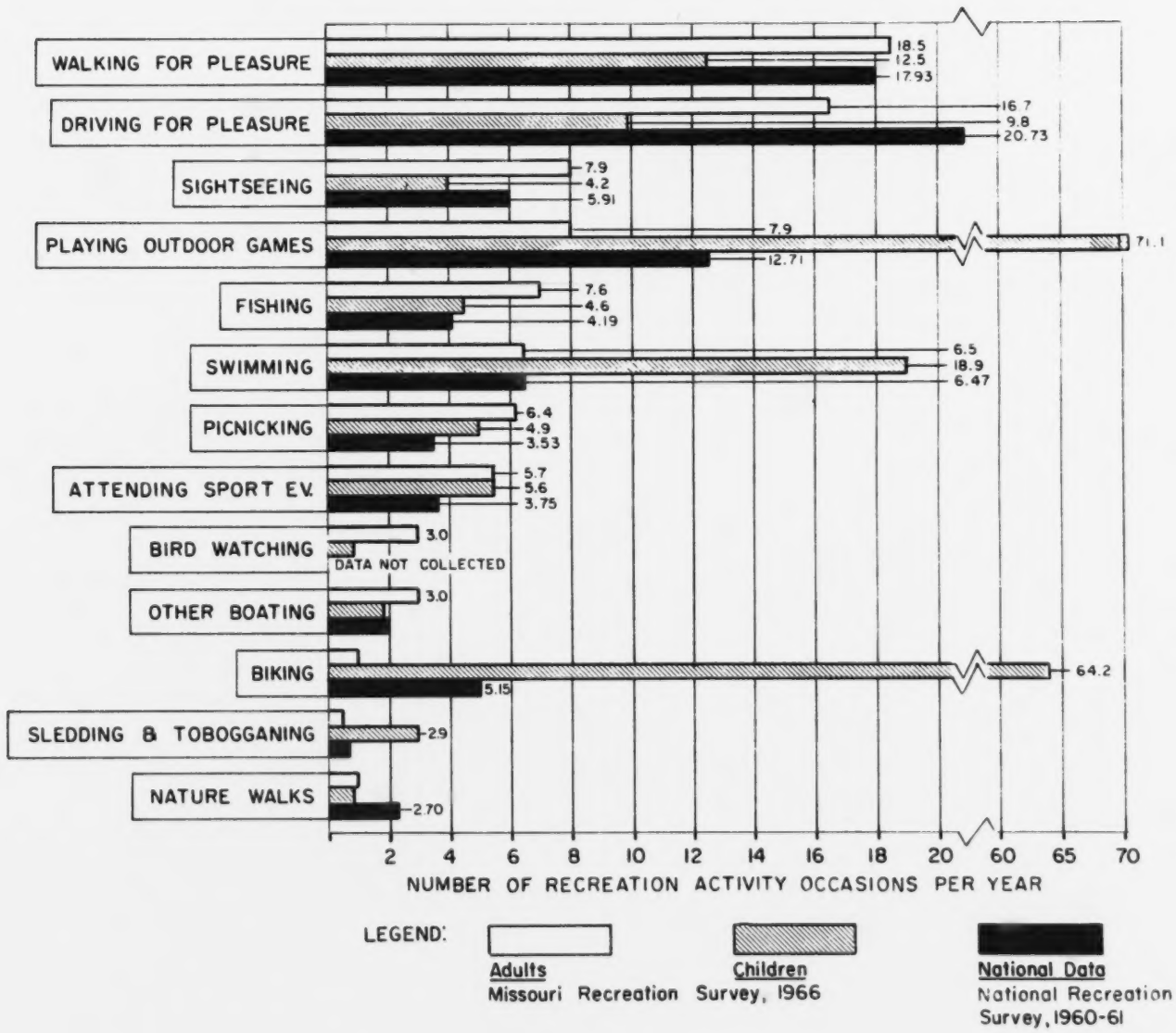


Figure 6

TABLE V

DEMAND FOR OUTDOOR RECREATION--MISSOURI RECREATION SURVEY, 1966
ADULT MALE RECREATION ACTIVITY PARTICIPATION--BY RECREATION REGIONS

Activities	National Recreation Survey 1/ 1960 Data	State As A Whole	1 Pony Express	2 Green Hills	3 Mark Twain	4 Kansas City Area	5 Old Trails Area	6 Daniel Boone	7 Land of the Osage	8 Lake of the Ozarks	9 Central Ozarks	10 Metropolitan St. Louis	11 White River	12 Big Springs	13 Old Settlement	14 Delta Area
Biking	5.15	1.1	2.0	0.0	0.1	0.9	0.7	2.2	1.4	0.0	0.9	1.0	1.5	4.6	0.8	2.1
Horseback Riding	1.25	0.9	3.1	0.0	2.1	0.8	0.6	1.7	1.3	0.0	0.9	0.4	0.2	0.9	3.8	0.2
Playing Games	12.71	10.3	16.5	12.4	11.2	11.4	7.1	8.6	9.2	5.2	13.2	10.7	7.9	12.2	7.9	2.6
Fishing	4.19	10.4	17.1	23.1	16.3	10.3	17.9	15.4	13.4	10.6	7.2	6.6	9.3	11.7	12.8	8.8
Canoeing	0.12	0.2	0.0	0.0	0.0	0.2	0.0	0.1	0.1	0.0	0.0	0.2	0.1	0.4	1.0	0.0
Sailing	0.11	0.1	0.2	0.1	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Other Boating	1.95	3.5	4.6	7.7	4.0	3.6	1.4	2.2	6.0	3.5	3.8	2.2	4.5	8.5	4.6	4.3
Swimming	6.47	6.5	8.0	9.5	6.9	6.0	7.3	6.9	4.0	7.9	5.6	6.7	7.1	9.9	7.8	2.9
Water Skiing	0.41	1.0	2.7	3.9	2.9	0.8	0.8	0.6	1.2	1.2	0.9	0.4	1.0	1.1	0.7	0.4
Hunting Small Game		3.8	8.4	12.3	11.0	3.6	5.0	5.4	3.7	6.7	3.2	1.7	2.9	4.5	3.6	2.2
Hunting Big Game	1.86	0.3	0.1	0.1	1.6	0.3	1.0	0.6	0.1	0.6	0.4	0.1	0.3	1.0	0.6	0.2
Hunting Waterfowl		0.6	2.8	2.4	3.5	0.4	1.3	0.5	0.1	0.4	0.4	0.1	0.1	0.2	0.2	0.1
Camping - Trailer		0.5	0.6	0.5	0.3	0.8	0.2	0.3	0.6	0.1	0.1	0.4	0.4	1.0	0.1	0.8
Camping - Tent	0.86	1.0	2.0	1.9	2.0	0.7	0.2	1.3	0.9	0.7	1.2	0.7	2.0	1.5	1.5	0.5
Camping - Group		0.1	0.1	0.0	0.2	0.2	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.0
Mountain Climbing	0.09	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hiking	0.42	0.3	0.3	0.6	0.5	0.4	0.0	0.1	0.1	1.0	0.6	0.4	0.0	0.6	0.4	0.0
Walking for Pleasure	17.93	16.7	18.1	11.3	10.4	22.2	3.5	8.5	14.5	1.8	6.8	20.8	14.2	17.3	12.6	12.4
Bird Watching	--	2.4	1.1	1.6	2.1	3.6	1.1	6.1	0.1	0.6	2.4	2.6	0.0	7.6	1.7	0.6
Wildlife Photography	--	0.2	0.1	0.8	0.2	0.1	0.0	0.1	0.0	0.0	0.2	0.2	0.1	0.1	1.2	0.0
Nature Walks	2.70	1.0	0.7	0.3	1.4	1.4	0.5	0.2	0.3	0.0	0.6	1.5	0.6	0.1	1.0	0.0
Picnics	3.53	6.5	8.3	11.4	13.8	8.1	4.6	4.5	4.4	3.9	5.8	5.6	4.1	6.1	10.8	2.6
Driving for Pleasure	20.73	16.9	33.5	30.2	34.7	18.5	15.0	7.0	17.4	8.3	16.0	13.7	7.8	22.4	21.9	12.0
Sightseeing	5.91	7.8	6.0	18.3	19.4	4.6	3.7	5.4	9.7	7.6	13.6	6.3	6.1	10.9	10.3	14.3
Attending Sports Events	3.75	6.6	9.1	7.0	11.0	6.9	6.2	9.0	6.7	3.0	7.1	6.6	5.2	5.0	4.0	3.1
Attending Concerts, Etc.	0.39	1.1	0.3	0.2	0.7	1.5	0.4	0.6	1.3	0.1	0.5	1.5	0.5	0.1	0.6	0.1
Ice Skating	0.55	0.3	0.6	1.5	0.6	0.2	0.2	0.1	0.1	0.1	0.4	0.4	0.0	0.0	0.1	0.0
Snow Skiing	0.07	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sledding or Tobogganning	0.51	0.2	0.8	0.1	0.4	0.2	0.0	0.0	0.1	0.1	0.5	0.2	0.0	0.6	0.2	0.0
Other	--	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Total	107.24	100.3	147.0	157.4	157.5	108.0	78.7	87.6	96.9	63.3	92.6	91.3	75.7	128.4	110.6	70.3

1/ "What Americans Do Most," number of activity (occasions) days per person, 12 years and older, June 1, 1960 - May 31, 1961. Published in the OUTDOOR RECREATION FOR AMERICA, GPO, 1962, p. 34.

Source: Midwest Research Institute.

NOTE: Participation is expressed in activity occasions--one person 20 years and over participating in any activity over half an hour in one day.

TABLE VI

DEMAND FOR OUTDOOR RECREATION--MISSOURI RECREATION SURVEY, 1966 ADULT
FEMALE RECREATION ACTIVITY PARTICIPATION--BY RECREATION REGIONS

Activities	National Recreation Survey 1/ 1960 Data	State As A Whole	1 Pony Express	2 Green Hills	3 Mark Twain	4 Kansas City Area	5 Old Trails Area	6 Daniel Boone	7 Land of the Osage	8 Lake of the Ozarks	9 Central Ozarks	10 Metropolitan St. Louis	11 White River	12 Big Springs	13 Old Settlement	14 Delta Area
Biking	5.15	1.2	0.0	0.2	0.4	1.5	2.3	2.3	1.1	0.0	1.9	1.0	1.7	0.2	1.3	1.8
Horseback Riding	1.25	0.5	1.6	0.0	1.0	0.6	0.2	1.0	1.0	0.0	1.0	0.4	0.1	0.6	0.6	0.1
Playing Games	12.71	5.7	9.3	4.1	7.5	5.2	4.4	2.1	3.3	6.5	9.7	6.1	4.0	10.0	6.1	1.7
Fishing	4.19	5.0	7.2	7.8	7.2	6.3	7.1	3.1	5.4	6.4	3.9	3.3	4.2	6.7	8.0	3.5
Canoeing	0.12	0.1	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.1	0.2	0.0
Sailing	0.11	0.1	0.1	0.1	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Other Boating	1.95	2.5	3.8	6.4	3.4	2.8	1.0	2.0	2.9	3.0	2.8	1.6	3.5	5.6	2.8	1.8
Swimming	6.47	6.4	7.1	8.2	7.4	6.2	7.3	6.2	3.9	7.1	5.3	6.8	6.9	7.5	7.6	2.9
Water Skiing	0.41	0.7	1.8	3.6	1.8	0.6	0.6	0.6	1.0	1.0	0.9	0.3	0.8	0.8	0.4	0.3
Hunting Small Game		0.2	0.0	0.1	0.3	0.4	0.1	0.0	0.1	0.0	0.7	0.1	0.2	1.0	0.6	0.0
Hunting Big Game	1.86	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0
Hunting Waterfowl		0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0
Camping - Trailer		0.4	0.5	0.4	0.3	0.6	0.2	0.4	0.1	0.1	0.0	0.3	0.4	1.0	0.1	0.6
Camping - Tent	0.86	0.8	1.8	1.7	1.6	0.6	0.2	1.2	0.6	0.7	0.9	0.6	1.4	1.2	1.3	0.3
Camping - Group		0.1	0.0	0.0	0.2	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.0
Mountain Climbing	0.09	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Hiking	0.42	0.4	0.3	0.5	1.1	0.2	0.3	0.1	0.1	1.1	0.5	0.4	0.0	0.6	0.4	0.0
Walking for Pleasure	17.93	20.1	31.6	21.1	14.3	23.8	8.2	11.3	23.3	1.9	8.3	22.7	23.8	6.2	13.7	20.5
Bird Watching	--	3.5	2.5	5.6	2.0	5.9	1.0	6.7	0.3	0.6	4.6	3.7	0.2	7.6	1.6	2.6
Wildlife Photography	--	0.1	0.0	1.0	0.2	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.5	0.0
Nature Walks	2.70	1.0	0.6	0.3	1.6	1.4	0.5	0.2	0.3	0.2	0.4	1.4	0.7	0.2	0.9	0.1
Picnics	3.53	6.3	8.0	11.3	13.3	7.7	4.4	4.6	4.5	3.8	5.6	5.5	4.0	6.1	10.2	2.7
Driving for Pleasure	20.73	16.5	33.2	31.8	33.8	19.0	14.8	7.0	16.7	8.1	15.4	12.8	7.6	20.2	20.7	11.4
Sightseeing	5.91	7.9	6.1	18.6	19.2	4.6	4.1	6.1	9.2	7.5	13.3	6.6	6.0	9.5	9.5	15.0
Attending Sports Events	3.75	4.8	7.5	6.7	8.1	4.8	5.6	5.8	4.7	2.2	6.1	4.2	4.9	4.2	3.3	2.5
Attending Concerts, Etc.	0.39	1.1	0.3	0.3	0.7	1.5	0.4	0.7	1.4	0.1	0.5	1.7	0.6	0.2	0.7	0.1
Ice Skating	0.55	0.3	0.6	1.2	0.5	0.2	0.0	0.1	0.1	0.1	0.2	0.3	0.0	0.0	0.1	0.0
Snow Skiing	0.07	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sledding or Tobogganning	0.51	0.2	0.4	0.1	0.2	0.2	0.0	0.0	0.1	0.1	0.3	0.2	0.0	0.0	0.1	0.0
Other	--	0.1	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	107.24	86.0	124.4	131.5	126.8	95.2	62.9	61.9	80.1	50.4	82.9	80.9	71.2	89.7	97.0	67.9

1/ "What Americans Do Most," number of activity (occasions) days per person, 12 years and older, June 1, 1960 - May 31, 1961. Published in the OUTDOOR RECREATION FOR AMERICA, GPO, 1962, p. 34.

Source: Midwest Research Institute.

NOTE: Participation is expressed in activity occasions--one person 20 years and over participating in any activity over half an hour in one day.

TABLE VII

DEMAND FOR OUTDOOR RECREATION--MISSOURI RECREATION SURVEY, 1966
ADULT (BOTH MALE AND FEMALE) RECREATION ACTIVITY PARTICIPATION--
BY RECREATION REGIONS

Activities	National Recreation Survey[1] 1960 Data	State As A Whole	1 Pony Express	2 Green Hills	3 Mark Twain	4 Kansas City Area	5 Old Trails Area	6 Daniel Boone	7 Land of the Osage	8 Lake of the Ozarks	9 Central Ozarks	10 Metropolitan St. Louis	11 White River	12 Big Springs	13 Old Settlement	14 Delta Area
Biking	5.15	1.1	1.0	0.1	0.2	1.2	1.5	2.3	1.3	0.0	1.5	1.0	1.6	2.3	1.1	1.9
Horseback Riding	1.25	0.7	2.3	0.0	1.6	0.7	0.4	1.3	1.1	0.0	0.9	0.4	0.1	0.7	2.2	0.1
Playing Games	12.71	7.9	12.8	8.1	9.3	8.2	5.8	5.3	6.1	5.8	11.4	8.3	5.8	11.1	6.9	2.1
Fishing	4.19	7.6	12.0	15.2	11.7	8.3	12.3	9.1	9.3	8.4	5.5	4.9	6.6	9.1	10.3	5.9
Canoeing	0.12	0.2	0.0	0.0	0.0	0.2	0.0	0.1	0.0	0.0	0.0	0.2	0.1	0.3	0.6	0.0
Sailing	0.11	0.1	0.1	0.1	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Other Boating	1.95	3.0	4.2	7.0	3.7	3.2	1.2	2.1	4.4	3.3	3.3	1.9	4.0	6.9	3.7	2.9
Swimming	6.47	6.5	7.5	8.8	7.1	6.1	7.3	6.6	4.0	7.4	5.5	6.8	7.0	8.6	7.7	2.9
Water Skiing	0.41	0.8	2.2	3.7	2.3	0.7	0.7	0.6	1.1	1.1	0.9	0.4	0.9	0.9	0.6	0.3
Hunting Small Game		1.9	4.1	6.0	5.6	1.9	2.5	2.7	1.8	3.2	1.9	0.9	1.5	2.7	2.1	1.0
Hunting Big Game	1.86	0.2	0.1	0.0	0.8	0.2	0.5	0.3	0.1	0.3	0.3	0.1	0.1	0.6	0.3	0.1
Hunting Waterfowl		0.3	1.4	1.2	1.7	0.2	0.6	0.2	0.1	0.2	0.3	0.1	0.0	0.1	0.1	0.0
Camping - Trailer		0.4	0.5	0.4	0.3	0.7	0.2	0.4	0.3	0.1	0.1	0.3	0.4	1.0	0.1	0.7
Camping - Tent	0.86	0.9	1.9	1.8	1.8	0.7	0.2	1.2	0.7	0.7	1.0	0.6	1.7	1.3	1.4	0.4
Camping - Group		0.1	0.1	0.0	0.2	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.0
Mountain Climbing	0.09	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hiking	0.42	0.4	0.3	0.6	0.8	0.3	0.2	0.1	0.1	1.0	0.5	0.4	0.0	0.6	0.4	0.0
Walking for Pleasure	17.93	18.5	25.1	16.4	12.4	23.0	5.9	10.0	19.1	1.9	7.6	21.8	19.2	11.5	13.2	16.8
Bird Watching	--	3.0	1.8	3.7	2.1	4.8	1.0	6.4	0.2	0.6	3.6	3.2	0.1	7.6	1.6	1.7
Wildlife Photography	--	0.1	0.1	0.9	0.2	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.8	0.0
Nature Walks	2.70	1.0	0.6	0.3	1.5	1.4	0.5	0.2	0.3	0.1	0.5	1.5	0.7	0.1	1.0	0.1
Picnics	3.53	6.4	8.2	11.4	13.6	7.9	4.5	4.5	4.4	3.9	5.7	5.6	4.0	6.1	10.5	2.7
Driving for Pleasure	20.73	16.7	33.4	31.1	34.3	18.8	14.9	7.0	17.1	8.2	15.7	13.3	7.7	21.2	21.3	11.7
Sightseeing	5.91	7.9	6.1	18.5	19.3	4.6	3.9	5.8	9.4	7.6	13.5	6.5	6.1	10.2	9.9	14.7
Attending Sports Events	3.75	5.7	8.3	6.8	9.6	5.8	5.9	7.4	5.6	2.6	6.6	5.4	5.0	4.6	3.6	2.7
Attending Concerts, Etc.	0.39	1.1	0.3	0.3	0.7	1.5	0.4	0.6	1.3	0.1	0.5	1.6	0.6	0.2	0.7	0.1
Ice Skating	0.55	0.3	0.6	1.3	0.5	0.2	0.1	0.1	0.1	0.1	0.3	0.3	0.0	0.0	0.1	0.0
Snow Skiing	0.07	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sledding or Tobogganning	0.51	0.2	0.6	0.1	0.3	0.2	0.0	0.0	0.1	0.1	0.4	0.2	0.0	0.3	0.2	0.0
Other	--	0.1	0.6	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0
Total	107.24	92.9	135.3	143.9	142.0	101.4	70.6	74.5	88.2	56.6	87.5	86.0	73.4	108.3	100.4	152.5

1/ "What Americans Do Most," number of activity (occasions) days per person, 12 years and older, June 1, 1960 - May 31, 1961. Published in the OUTDOOR RECREATION FOR AMERICA, GPO, 1962, p. 34

Source: Midwest Research Institute.

NOTE: Participation is expressed in activity occasions--one person 20 years and over participating in any activity over half an hour in one day.

TABLE VIII

DEMAND FOR OUTDOOR RECREATION--MISSOURI RECREATION SURVEY, 1966
CHILDREN RECREATION ACTIVITY PARTICIPATION--BY RECREATION REGIONS

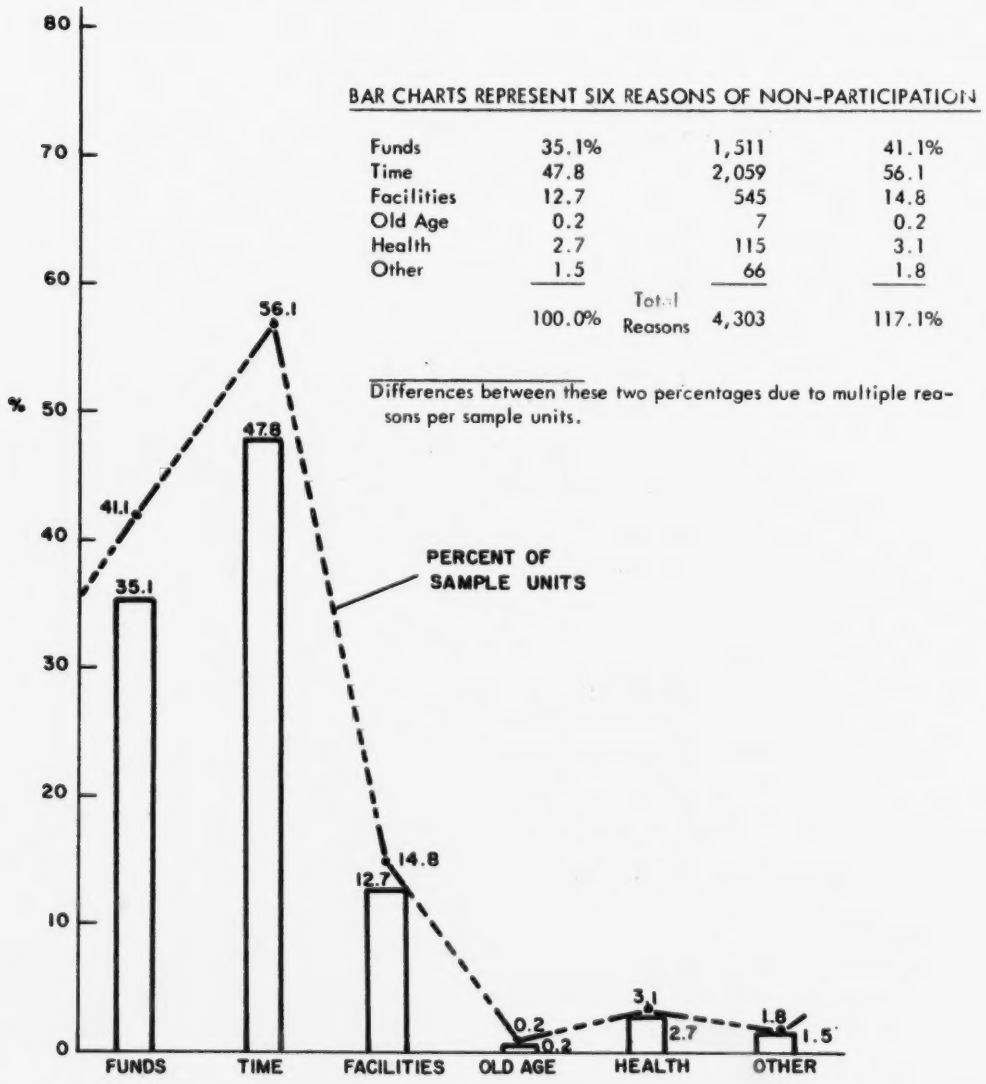
Activities	National Recreation Survey[1] 1960 Data	State As A Whole	1 Pony Express	2 Green Hills	3 Mark Twain	4 Kansas City Area	5 Old Trails Area	6 Daniel Boone	7 Land of the Osage	8 Land of the Ozarks	9 Central Ozarks	10 Metropolitan St. Louis	11 White River	12 Big Springs	13 Old Settlement	14 Delta Area
Biking	5.15	64.2	88.0	86.0	38.3	69.9	54.6	38.4	66.0	19.7	71.2	61.3	89.2	70.3	75.7	60.6
Horseback Riding	1.25	2.9	6.9	3.2	3.5	6.8	2.8	2.5	1.3	0.2	1.8	1.2	0.3	6.6	4.3	0.9
Playing Games	12.71	71.1	84.6	126.8	61.3	56.9	18.8	65.9	59.0	21.0	70.7	75.5	124.4	88.3	127.6	61.3
Fishing	4.19	4.6	7.1	8.2	8.5	3.5	7.0	4.0	5.0	5.6	4.1	3.6	4.7	4.4	9.1	1.8
Canoeing	0.12	0.2	0.0	0.0	0.1	0.2	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.1	0.1	0.0
Sailing	0.11	0.1	0.0	0.0	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Other Boating	1.95	1.8	2.4	3.9	4.0	1.6	0.6	1.2	3.4	1.4	2.1	1.2	3.5	2.6	2.2	0.9
Swimming	6.47	18.9	18.8	33.5	24.8	16.5	22.2	12.1	12.6	16.6	16.6	21.0	18.8	15.5	23.1	5.6
Water Skiing	0.41	0.7	1.7	1.7	1.3	0.7	0.5	0.3	2.0	0.6	0.9	0.4	0.7	0.9	0.4	0.6
Hunting Small Game		0.8	2.7	3.7	2.2	0.4	0.9	0.4	0.8	0.6	1.3	0.4	0.8	1.2	1.4	0.2
Hunting Big Game	1.86	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.0
Hunting Waterfowl		0.1	0.5	0.8	0.7	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Camping - Trailer		0.3	0.5	0.7	0.3	0.5	0.1	0.7	0.2	0.1	0.0	0.3	0.2	0.0	0.1	1.2
Camping - Tent	0.86	1.0	2.1	2.9	1.6	0.9	0.1	2.3	0.8	0.2	0.7	0.8	1.7	1.1	1.6	0.2
Camping - Group		0.3	0.3	0.3	0.3	0.6	0.1	0.5	0.1	0.1	0.2	0.2	0.0	0.0	0.8	0.0
Mountain Climbing	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hiking	0.42	0.5	0.3	1.4	0.8	0.7	0.4	0.5	0.5	0.5	0.2	0.5	0.0	0.5	1.2	0.1
Walking for Pleasure	17.93	12.5	18.0	9.4	7.7	15.6	1.9	1.5	8.4	1.8	2.1	15.9	9.7	6.4	21.6	4.5
Bird Watching	--	0.7	0.0	0.0	0.0	0.6	0.4	0.9	0.0	0.0	0.3	1.3	0.0	0.1	0.4	0.5
Wildlife Photography	--	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nature Walks	2.70	0.9	0.5	0.2	1.6	0.7	0.3	0.0	0.1	0.1	0.2	1.5	0.4	0.2	0.9	0.2
Picnics	3.53	4.9	5.2	9.8	8.7	5.3	2.9	4.0	3.2	2.5	4.5	4.6	3.1	3.7	13.8	2.0
Driving for Pleasure	20.73	9.8	17.5	15.6	15.6	11.9	9.3	3.0	10.8	3.4	6.8	8.1	4.9	11.2	19.1	6.3
Sightseeing	5.91	4.2	3.2	8.2	11.0	2.7	1.7	3.6	5.4	2.3	6.4	3.9	4.2	5.4	6.9	3.0
Attending Sports Events	3.75	5.6	8.4	9.9	11.7	4.8	4.8	4.0	6.5	2.6	7.0	5.2	8.2	5.8	4.1	2.5
Attending Concerts, Etc.	0.39	0.6	0.1	0.1	0.9	0.5	0.4	0.4	0.6	0.0	0.0	0.8	0.4	0.1	0.4	0.1
Ice Skating	0.55	1.0	2.6	5.7	0.7	0.5	0.5	1.1	0.1	0.3	0.7	1.3	0.0	0.1	0.3	0.0
Snow Skiing	0.07	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Sledding or Tobogganning	0.51	2.9	11.9	18.7	2.9	5.0	0.9	1.9	0.3	1.3	1.3	1.5	1.7	1.0	1.8	0.1
Other	--	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
Total	107.24	210.8	283.4	351.0	209.0	206.7	131.5	149.1	187.1	81.0	199.7	211.4	276.9	225.7	317.2	152.5

1/ "What Americans Do Most," number of activity (occasions) days per person, 12 years and older, June 1, 1960 - May 31, 1961. Published in the OUTDOOR RECREATION FOR AMERICA, GPO, 1962, p. 34.

Source: Midwest Research Institute.

NOTE: Participation is expressed in activity occasions--one person (age 6 to 19, inclusive) participating in any activity over half an hour in one day.

REASONS FOR NON-PARTICIPATION IN RECREATION ACTIVITIES



BAR CHARTS REPRESENT SIX REASONS OF NON-PARTICIPATION

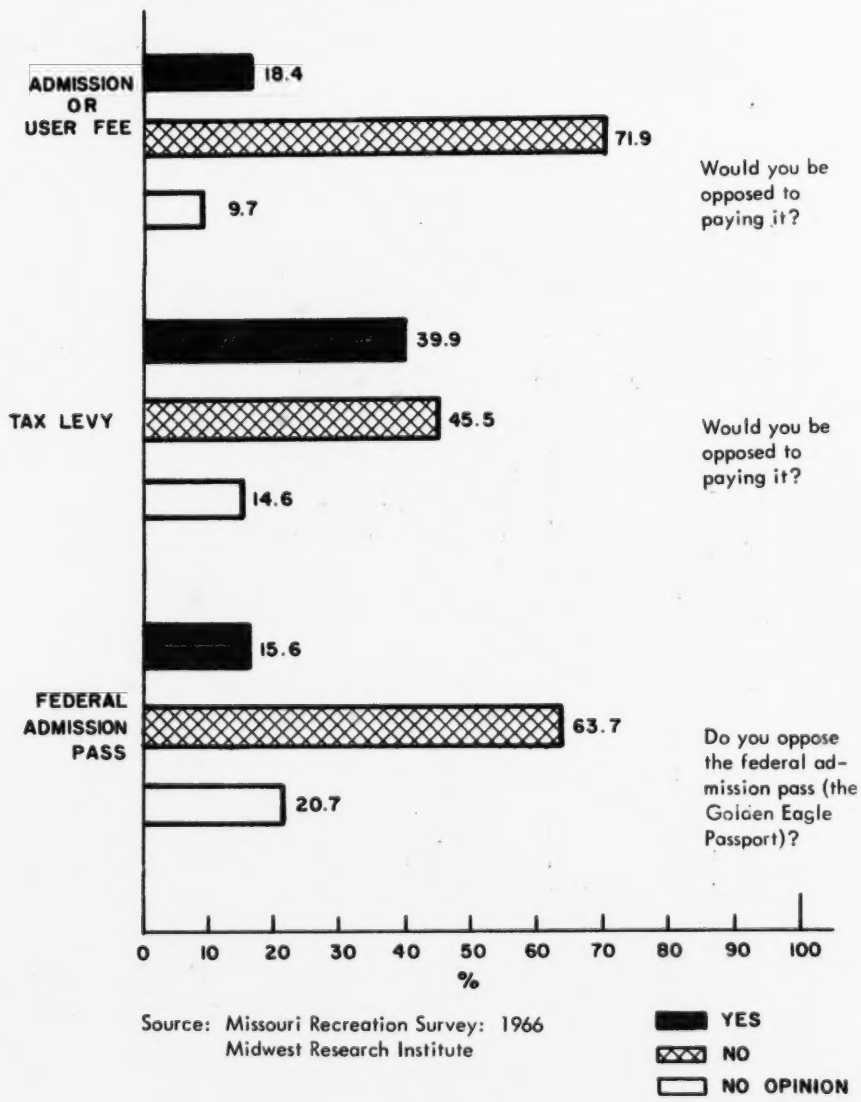
Funds	35.1%		1,511	41.1%
Time	47.8		2,059	56.1
Facilities	12.7		545	14.8
Old Age	0.2		7	0.2
Health	2.7		115	3.1
Other	1.5		66	1.8
	100.0%	Total Reasons	4,303	117.1%

Differences between these two percentages due to multiple reasons per sample units.

Source: Missouri Recreation Survey: 1966
Midwest Research Institute

Figure 7

REACTIONS TO USER AND ADMISSION FEES



Source: Missouri Recreation Survey: 1966
Midwest Research Institute

Figure 8

TABLE IX

PRESENT AND FUTURE DEMAND FOR OUTDOOR RECREATION BY THE MISSOURI POPULATION
1965, 1980, 2000, 2020

(In Million Activity Occasions)

Facilities	Activities	1965	1980	2000	2020
Activities Associated With Certain Facilities and/or Resources					
Playfield	Playing Outdoor Games-Ball, Golf, Badminton, Tennis, Etc.	163.4	283.5	492.5	728.5
Swimming Pool and Beach	Swimming, Wading, Bathing, Sunbathing on Beach	52.2	90.7	157.5	232.9
Picnic Ground	Picnicking	23.0	39.9	69.4	102.6
Camping Ground	Tent	3.8	6.6	11.5	17.0
	Trailer	1.5	2.7	4.6	6.9
	Group	0.7	1.3	2.2	3.3
Marina	Boating, Sailing, Canoeing, Etc.	3.5	6.2	10.7	15.8
Trails	Horse	7.5	12.9	22.5	33.3
	Foot	1.8	3.1	5.4	8.0
	Bike	135.6	235.3	408.8	604.7
Wildlife	Hunting-Small, Big Game and Waterfowl	2.2	3.8	6.7	9.9
	Fishing-Cold and Warm Water Fish	24.7	42.8	74.3	109.9
Activities Presently Not Comparable To Facilities and/or Resources					
	Water Skiing	3.2	5.5	9.6	14.2
	Mountain Climbing	0.1	0.2	0.3	0.5
	Walking for Pleasure	63.0	109.4	189.9	281.0
	Bird Watching	7.4	12.8	22.3	33.0
	Wildlife and Bird Photography	0.3	0.5	0.9	1.4
	Driving for Pleasure	53.8	93.4	162.2	240.0
	Sightseeing	24.4	42.3	73.5	108.7
	Attending Sport Events	23.0	39.9	69.2	102.4
	Attending Concerts, Plays, Etc.	3.3	5.8	10.0	14.9
	Ice Skating	2.5	4.4	7.6	11.3
	Snow Skiing	0.1	0.2	0.4	0.6
	Sledding and Tobogganing	6.3	10.9	19.1	28.2
	Other, Unlisted	0.3	0.5	0.9	1.3
Total		607.6	1,054.6	1,832.0	2,710.3

Source: Missouri Recreation Survey, 1966, Midwest Research Institute.

TABLE X

OUT-OF-STATE TOURISTS IN MISSOURI BY DURATION OF VISIT, NUMBER OF TOURISTS AND NUMBER OF MAN-DAYS, BY STATE, 1964

State	Duration	Tourists	Rank	Man-Days	Rank	Percent Tourists to Total
Alabama	1.20	81,171		91,573		0.4428
Arizona	2.47	471,413	10	1,096,204	8	2.5715
Arkansas	0.74	437,989		305,753		2.3891
California	3.24	1,734,793	3	5,305,810	1	9.4630
Colorado	2.62	313,458		773,865		1.7098
Connecticut	0.91	53,039		45,521		0.2893
Delaware	0.84	28,649		22,803		0.1563
Dist. of Columbia	2.30	73,428		159,623		0.4005
Florida	4.10	171,763		663,925		0.9369
Georgia	2.42	53,555		122,399		0.2921
Idaho	4.86	31,875		146,103		0.1739
Illinois	1.27	3,257,819	1	3,910,629	2	17.7708
Indiana	1.28	921,274	7	1,112,399	7	5.0254
Iowa	2.13	1,042,708	5	2,096,526	5	5.6878
Kansas	1.83	1,911,073	2	3,307,558	3	10.4245
Kentucky	0.93	227,383		199,326		1.2403
Louisiana	2.09	162,213		319,136		0.8848
Maine	0.36	2,710		920		0.0148
Maryland	2.21	109,562		228,392		0.5976
Massachusetts	1.93	110,078		200,211		0.6004
Michigan	1.19	854,169	9	956,734	10	4.6593
Minnesota	2.97	185,829		521,477		1.0137
Mississippi	0.65	61,943		38,135		0.3379
Montana	1.60	15,228		23,054		0.0831
Nebraska	2.37	338,622		755,499		1.8471
Nevada	1.07	24,519		24,821		0.1337

TABLE X (Concluded)

State	Duration	Tourists	Rank	Man-Days	Rank	Percent Tourists to Total
New Hampshire	1.22	13,808		15,957		0.0753
New Jersey	2.06	178,602		347,028		0.9742
New Mexico	1.66	237,965		372,053		1.2980
New York	1.31	369,723		456,346		2.0168
North Carolina	1.84	61,298		106,249		0.3344
North Dakota	1.65	16,776		26,176		0.0915
Ohio	1.14	909,918	8	979,349	9	4.9634
Oklahoma	1.58	1,019,480	6	1,523,337	6	5.5611
Oregon	5.23	60,911		300,562		0.3323
Pennsylvania	1.20	400,694		452,760		2.1857
Rhode Island	1.71	20,648		33,372		0.1126
South Carolina	2.92	36,521		100,562		0.1992
South Dakota	1.87	40,650		71,707		0.2217
Tennessee	0.64	232,416		141,299		1.2678
Texas	1.69	1,375,265	4	2,195,376	4	7.5018
Utah	2.18	25,810		53,065		0.1408
Vermont	2.85	7,743		20,828		0.0422
Virginia	1.40	138,210		182,926		0.7539
Washington	3.21	92,786		281,043		0.5061
West Virginia	0.47	65,944		29,303		0.3597
Wisconsin	2.20	241,836		501,498		1.3192
Wyoming	6.48	27,874		170,423		0.1520
Other	1.50	81,300		114,836		0.4439
Total	1.69	18,332,441		30,904,451		100.0000

The first ten states .... 73.6 percent .... 22.484 million man-days.

Source: 1964 Missouri Tourist Study (Preliminary Report), Division of Commerce and Industrial Development, Jefferson City, Missouri, 1965, p. 5.

TABLE XI

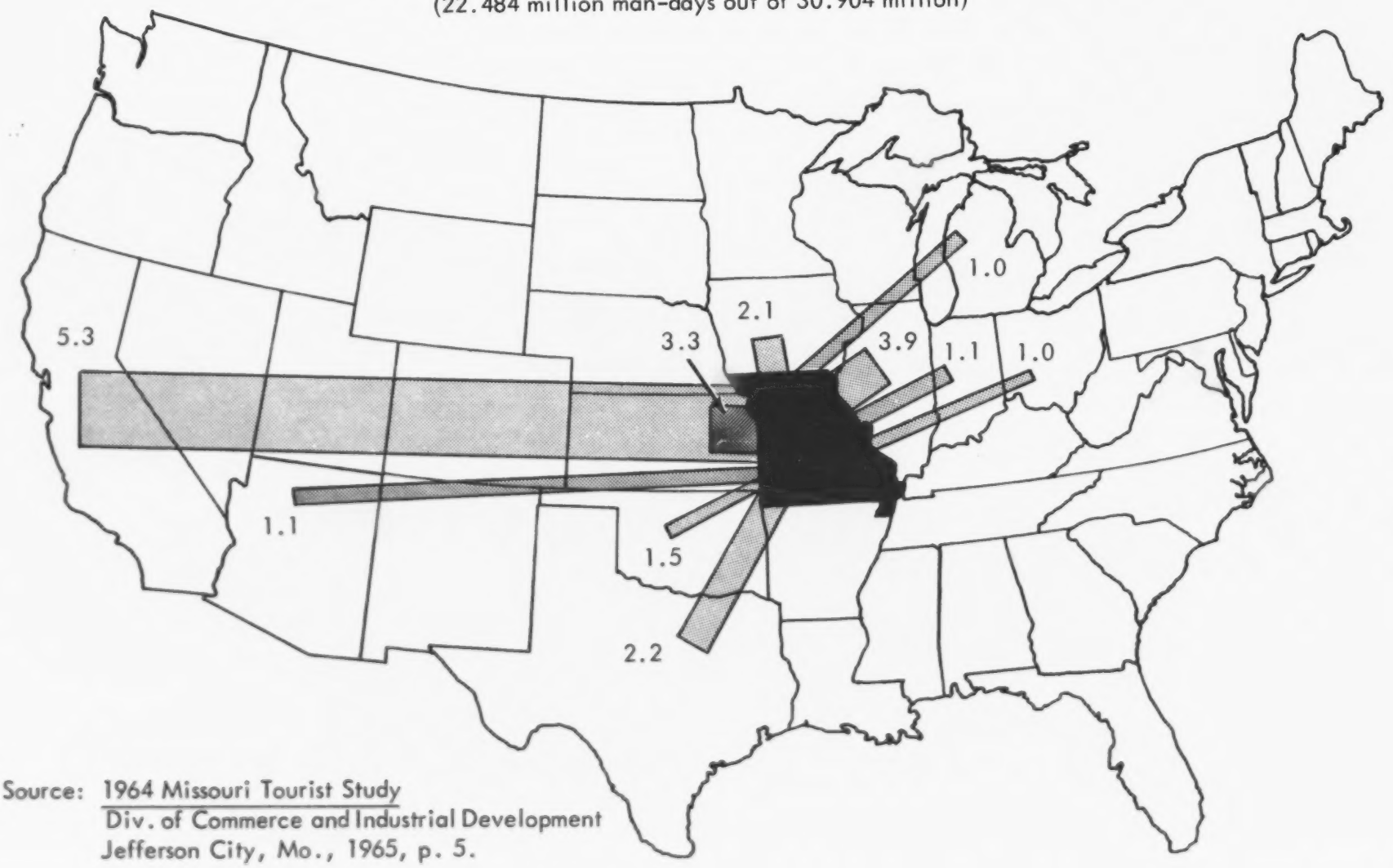
NUMBER OF OUT-OF-STATE TOURISTS AND THEIR DURATION OF STAY IN MISSOURI, 1965

Number of Nights	Number of Tourists	Percent of Total Tourists	Number of Man-Days	Percent of Total Man-Days
0	12,493,051	63.0	0	0.0
1	2,855,231	14.4	2,855,231	8.5
2	934,014	4.7	1,868,028	5.6
3	883,750	4.5	2,651,250	7.9
4	621,375	3.1	2,485,500	7.4
5	453,352	2.3	2,266,760	6.8
6	174,916	0.9	1,049,496	3.1
7	493,407	2.5	3,453,849	10.3
8	86,873	0.4	694,984	2.1
9	32,447	0.2	292,023	0.9
10	167,438	0.8	1,674,380	5.0
11	17,557	0.1	193,127	0.6
12	24,969	0.1	299,628	0.9
13	14,435	0.1	187,655	0.6
14	300,349	1.5	4,204,886	12.6
Over 14	267,967	1.4	9,237,257	27.7
Total	19,821,131	100.0	33,414,054	100.0

Source: 1965 Missouri Tourist Study (Preliminary Report), Division of Commerce and Industrial Development, Jefferson City, Missouri, 1966, p. 4.

ORIGIN OF VISITORS TO MISSOURI, 1964

Ranking of States in Number of Man-Days Spent in Missouri by Visitors
(22.484 million man-days out of 30.904 million)



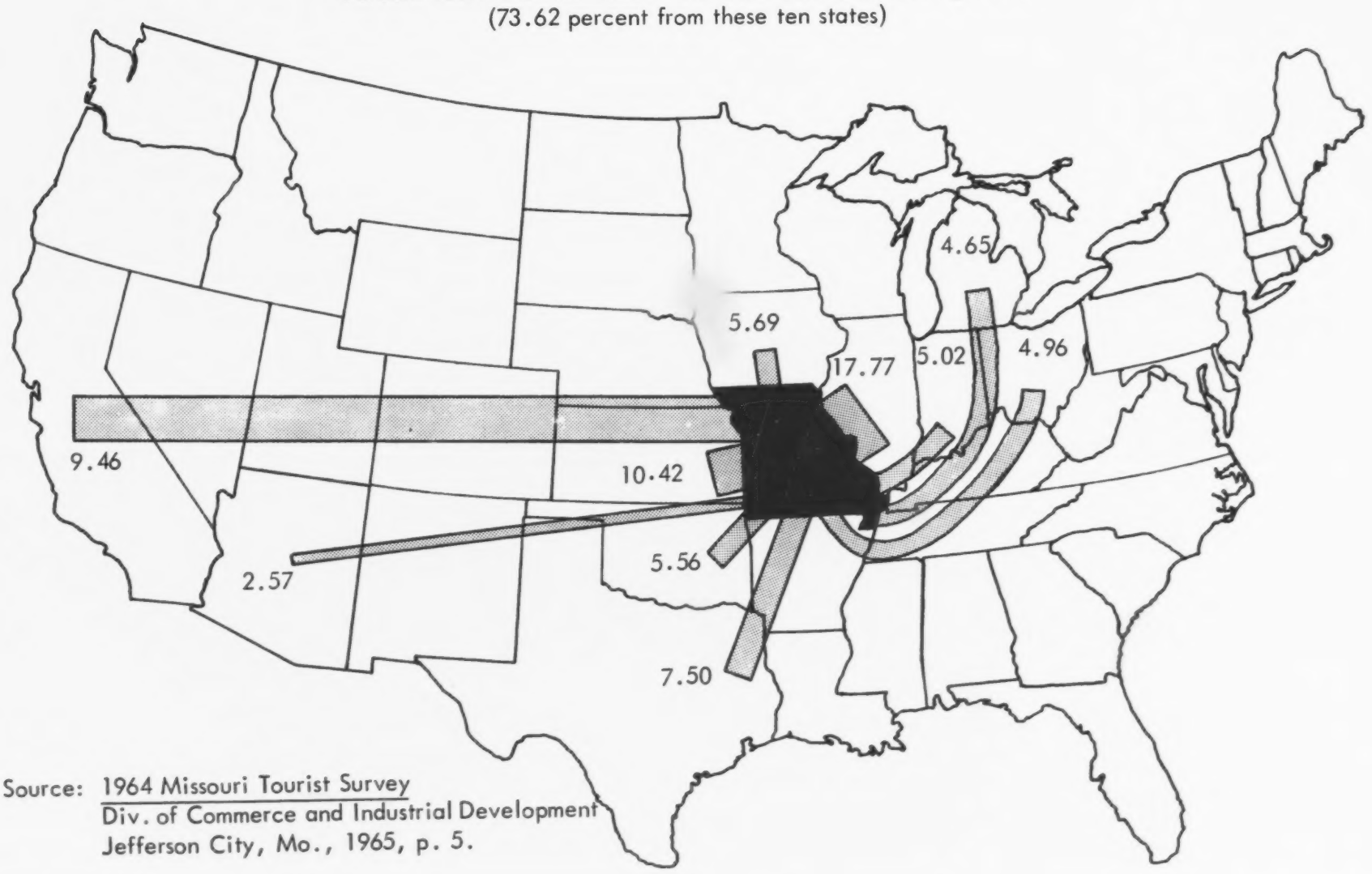
Source: 1964 Missouri Tourist Study
Div. of Commerce and Industrial Development
Jefferson City, Mo., 1965, p. 5.

All figures expressed in millions.

Figure 9

ORIGIN OF VISITORS TO MISSOURI, 1964

Percent Tourists of the Total - The First Ten Contributing States
(73.62 percent from these ten states)



Source: 1964 Missouri Tourist Survey
Div. of Commerce and Industrial Development
Jefferson City, Mo., 1965, p. 5.

All figures expressed as percent.

Figure 10

TABLE XII

OUT-OF-STATE TOURIST PARTICIPATION IN OUTDOOR RECREATION
ACTIVITIES AND REASONS FOR VISITING MISSOURI DURING 1964 AND 1965

Activity or Reason	Participation Rate[a]	1964 Demand Activity Occasions[b]	1965 Demand Activity Occasions[c]
Sight-seeing	39.5	12,070,700	13,198,551
Visiting Parks	28.3	8,648,147	9,456,177
Historical Sites	24.8	7,578,588	8,286,685
Photography	24.3	7,425,794	8,119,615
Swimming	20.4	6,234,000	6,816,467
Fishing	19.3	5,897,853	6,448,912
Visiting Cities	15.5	4,736,618	5,179,178
Camping	13.2	4,033,765	4,410,655
Relaxing	13.1	4,003,206	4,377,241
Boating	13.0	3,972,647	4,343,827
Cultural	5.9	1,802,971	1,971,429
Water Skiing	4.3	1,314,029	1,436,804
Hunting	2.1	641,735	701,695
College--University Events	2.1	641,735	701,695
Professional Sports	1.9	580,618	634,867
Other	3.6	1,100,118	1,202,906
Total	231.3[d]	70,682,524	77,286,704

a/ 1964 Missouri Tourist Survey, Division of Commerce and Industrial Development, Jefferson City, Missouri, 1966, p. 6.

b/ Participation rates extended to total number of 1964 out-of-state tourist man-days (30,904,451) spent in Missouri.

c/ Participation rates extended to total number of 1965 out-of-state tourist man-days (33,414,054) spent in Missouri.

d/ Total exceeds 100 percent due to more than one activity or reason per tourist.

THE SUPPLY OF OUTDOOR RECREATION

NUMBER AND SIZE OF RECREATIONAL AREAS

Recreation areas, representing the "supply" side of the analysis, fall into two categories--developed and undeveloped areas. On an acreage basis, only about 2 percent of the state's recreation areas fall into the "developed" category.

There are 3,373 recreation areas in the state comprising a total land area of nearly 2.8 million acres and slightly more than 154,000 water surface acres. Nearly half of the areas (1,639) are small--10 acres or less (Table XIII).[1/] Expansions are planned in 194 existing areas, and 110 new developments were identified, all in the planning stage.

OWNERSHIP OF AREAS

The Federal government owns and controls more than 2.294 million acres in 116 recreation areas--mostly national forest lands. This is 82 percent of the total recreation area in the state (Table XIV). Next in order--still measured in terms of acreages--are the State of Missouri, private owners, local governments, and counties. Measured in terms of number of areas, the private sector predominates--private owners control 1,362 areas. They are closely followed by local governments (excluding counties), which control 1,055 areas. A detailed breakdown of recreation areas by size, ownership and administration of recreation land is shown in Tables XIII and XIV.

GEOGRAPHICAL DISTRIBUTION

Numerical distribution of recreation areas among the 14 recreation regions is relatively uniform (Tables XIII and XV). In the 10 acres or less category, leading regions are Lake of the Ozarks (391 areas), White River Country (312), St. Louis (299), and Kansas City (118). Lake of the Ozarks and White River Country, of course, are located at the heart of two distinct recreation empires. Their areas are, for the most part, privately owned resorts. Facilities in the St. Louis and Kansas City areas--characterized by metropolitan environments--are chiefly publicly owned playgrounds and small parks located within city limits.

[1]Figures and Tables are located at the end of this section.

Turning to areas with more than 10 acres, nearly the same rankings are perceptible. St. Louis leads with 319 areas, followed by White River (191), Kansas City (131), and Old Settlement Playgrounds (127).

Lowest ranking of the regions overall is the Delta Area, which has 26 areas in the 10 acres or less category and 39 in the larger size group.

DEVELOPED RECREATION FACILITIES

While a recreation area or resource can provide opportunities for recreation in its undeveloped state, recreational activity can be satisfied, in most instances, in a superior manner when man-made facilities are provided or the area is improved and adapted to a given purpose by development. Certain activities depend on a natural setting, for instance a scenic view. Most other activities, however, are enhanced by improvement. Thus, a well laid out hiking trail is better than an uncharted forest for walking...a swimming pool is superior to a swimming hole.

In the state of Missouri, developed recreation facilities account for 2 percent of total acreage, or 59,000 acres. In order of importance, the top ranking facilities are picnic grounds, occupying 11,291 acres, playfields (8,472), golf courses (6,264), group camping (5,168), tent camping (3,438), and swimming beaches (2,644). To the last category must be added 1.4 million square feet of man-made swimming pools--about 32 acres--in order to appreciate the popularity of water sports. (Swimming pools not open to the general public were excluded from this inventory.)

In terms of acreages, the first five regions are St. Louis, Old Settlement, White River Country, the Old Trails Area, and Lake of the Ozarks. All of these areas have developed facilities of more than 4,200 acres each (Table XVI). Lowest is the Green Hills region with 977 acres of developed facilities.

Metropolitan areas lead the state in playground, picnic ground, and golf course acreages and in swimming pools. Swimming beaches, tent camps, trailer camps, hotels, lodges, cabins, and the like appear in greatest number in the water and recreation resource regions of the state: White River, Lake of the Ozarks, Old Trails, and Big Spring.

A distinct category of facilities--roads, trails, and paths--was also inventoried. A total of 8,092 miles of roads and trails suitable to recreation purposes are located in the state. For the most part, they are located in the Ozarks region.

POTENTIAL SUPPLY

More than 300 planned recreation areas were identified. They were generally associated with these major recreation resources:

* Authorized Federal Reservoirs--Kaysinger Bluff, Stockton, Cannon, Smithville, Grand River Basin (five reservoirs), Meramec River Basin (five reservoirs), and Long Branch on the Chariton River.

* Lewis and Clark Trail--27 access areas on the Missouri River are authorized, serving to open the river for recreation uses in a historic setting.

* The Great River Road will parallel the Mississippi in the same manner as the Lewis and Clark Trail parallels the Missouri River.

* State Park System--continuing development to provide a suitable environment for recreation will result in increased opportunities in face of an expanding demand.

* Hunting and Fishing on Private Land--opportunities are available at present, but not everywhere and for everyone. Cooperative action to keep private lands available for hunting and fishing will help meet these recreation needs.

* Acreages along highways controlled by the Missouri Highway Department hold great potential for recreation use.

* Private Enterprise--more than 80 privately held areas were pinpointed which could become recreation areas with proper development. In a state fortunate enough to possess two major rivers, a dozen or more reservoirs, large tracts of forest land, hills, mountains, and clear wild rivers, encouragement of private enterprise could lead to the creation of a large number of new recreation areas.

DEMAND AND SUPPLY COMPARED

Fundamental to any comparison of demand and supply figures has been the development of standards for measuring the facility "carrying capacity." Capacity depends on four factors--type of facility under consideration, the average number of people who can use it simultaneously, the average daily turnover, and length of the season during which it can be used. Standards used in the analysis are shown in Table XVII. A glance at the table reveals that a variety of activities are excluded (for instance sight-seeing, bird watching, driving for pleasure) because no standards to measure such activities have yet been devised.

In comparing demand and supply for measurable facilities, "need" as opposed to "idle capacity" are determinable. Table XVIII summarizes the comparisons for the years 1965, 1980, 2000, and 2020 in millions of activity occasions for the state as a whole. Figure 11 shows 1965 data in graphic form. The present situation may be summed up by saying that of 12 activities, seven show a need for more facilities and five display idle capacity. On a state-wide basis, by far the greatest need is for hunting areas and playfields. Greatest idle capacity is displayed by picnic grounds.

All told, more than 225 million activity occasions are missed because of non-existent or over crowded facilities. In forecasting need and idle capacity to future years, the carrying capacities of potential areas were calculated and included. Even so, unsatisfied demand will increase to 525 million activity occasions in 1980, 1.06 billion in 2000, and 1.7 billion in 2020.

Regional analysis reveals a significantly different picture from that presented by an anlaysis of the state as a whole--almost all recreation regions have major needs in nearly all categories of recreation facilities. A look at swimming and fishing shows the situation underlying state data.

Swimming, which shows idle capacity on a state-wide basis, is analyzed by region in Figure 12. In nine of the 14 recreation regions, less than 30 percent of the need is satisfied. Five regions have idle capacity--sufficient idle capacity to shift the state into the "idle" column in swimming. Clearly, however, considerable need exists for swimming facilities in the majority of regions.

Fishing (Figure 13) shows modest need on a state-wide basis. A look at the regional tables reveals, however, that all but one of the recreation regions have need for more fishing facilities--in the majority, less than 10 percent of the demand is satisfied. Idle capacity exists only in

one recreation region--the Lake of the Ozarks Country. Here, there is sufficient idle capacity (96 percent) to distort the picture of needs when the data are consolidated for the state as a whole.

Detailed regional analysis of all facilities are presented in the Statistical Summary of the Missouri Recreation Survey, 1966, Volumes I through III.

PRIVATE FINANCING OF OUTDOOR RECREATIONAL DEVELOPMENT

As a part of the recreation survey--and as an important input in forecasting future supply of facilities--a poll of commercial banks in the state was undertaken to determine bank policy on outdoor recreation development loans and to assess bank experience with this type of loan.

The basic impetus behind this specific research task was the realization that private endeavor will play a very significant part in the development of recreation facilities in coming years.

Of the state's 600 commercial banks, 251 were selected for the survey and 142 returned the questionnaires. The overall conclusion of the survey was that the private entrepreneur, seeking funds for an outdoor recreation venture, will encounter a generally favorable borrowing "climate."

Some items:

* More than half of the banks made loans to private operators for recreation businesses.

* Of banks which had received loan applications, more than 90 percent had actually closed loans. But ...

* Only 56 percent of the banks had ever received an application.

* Forty-two percent of the bankers believed recreation loans were generally good risks; 43 percent had no opinion; and 13 percent expressed negative experience with such loans.

* Finally, about one-fourth of the respondents (28 percent) stated definitely that they would cooperate with state and/or federal agencies in making loans for private developments in their area. More than half would seriously consider such cooperative loans. Only 14 percent said they would not cooperate.

PUBLIC AND PRIVATE PARTICIPATION IN THE SURVEY

In order to assure the widest possible participation in the study by public and private bodies in Missouri, more than 1,000 contacts were made with public agencies, associations, civic groups, and corporation representatives, as well as with private individuals, to obtain their ideas, recommendations, and to gather information about their activities.

Nearly a third of those queried responded, a promising indication of interest and some measure of assurance that one of the objectives of this effort was fulfilled: to broaden the foundation of public understanding of outdoor recreation planning and to increase the base for potential support for present and future action programs.

Given below is a list of major agencies and other groups which contributed to this study. Their cooperation is appreciated.

Conservation Federation of Missouri
Chambers of Commerce
Planning Commissions and Municipalities
United States Department of Agriculture - Selected Agencies
United States Department of Commerce - Selected Agencies
United States Department of Defense - Corps of Engineers, By District Agencies
United States Department of Health, Education and Welfare - Selected Agencies
United States Department of Labor - Selected Agencies
United States Department of Interior - Selected Agencies
United States Government - Selected Independent Agencies
Members of the Inter-Agency Council for Outdoor Recreation, Missouri
Other State Agencies, Missouri
Associations
Schools, Universities, and Colleges
Corporations and Individuals

TABLE XIII

RECREATION AREAS OF MISSOURI,
BY REGION AND SIZE

	Region	10 Acres or Less	More Than 10 Acres	Planned
1.	Pony Express Territory	53	66	7
2.	Green Hills Region	38	40	10
3.	Mark Twain Region	94	59	12
4.	Kansas City Area	118	131	57
5.	Old Trails Area	25	63	21
6.	Daniel Boone Region	50	61	14
7.	Land of the Osage	63	70	10
8.	Lake of the Ozarks Country	391	79	11
9.	Central Ozarks Region	70	113	15
10.	Metropolitan St. Louis	299	319	60
11.	White River Country	312	191	46
12.	Big Springs Country	52	72	22
13.	Old Settlement Playgrounds	48	127	19
14.	Delta Area	26	39	0
	State	1639	1430	304

Source: Missouri Recreation Survey, 1966, Statistical Summary.

TABLE XIV

MISSOURI'S EXISTING OUTDOOR RECREATION AREAS
AND ACREAGES BY TYPE OF OWNERSHIP, ADMINISTRATION

	Areas				Acres			
	Owns		Administers		Owns		Administers	
	Number of Areas	Percent of Total	Number of Areas	Percent of Total	Number of Acres	Percent of Total	Number of Acres	Percent of Total
Federal	116	3.8	94	3.1	2,294,506	81.6	2,291,593	81.5
State	377	12.3	372	12.1	349,036	12.4	353,091	12.6
Counties	70	2.3	74	2.4	11,611	0.4	11,910	0.4
Other Local Government	1,055	34.4	1,093	35.6	44,486	1.6	45,989	1.6
Quasi-Public	74	2.4	0	0.0	11,418	0.4	0	0.0
Private	1,362	44.3	1,433	46.7	101,268	3.6	109,986	3.9
Unknown	15	0.5	3	0.1	644	0.1	400	0.1
TOTAL	3,069	100.0	3,069	100.0	2,812,969	100.0	2,812,969	100.0

Source: Missouri Recreation Survey, 1966.

TABLE IV

RECREATION AREAS OF MISSOURI,
BY REGION AND OWNERSHIP

Region	Total	Private Ownership
1. Pony Express Territory	126	27
2. Green Hills Region	68	10
3. Mark Twain Region	103	27
4. Kansas City Area	306	40
5. Old Trails Area	109	35
6. Daniel Boone Region	125	39
7. Land of the Osage	143	24
8. Lake of the Ozarks Country	481	425
9. Central Ozarks Region	190	53
10. Metropolitan St. Louis	676	181
11. White River Country	549	342
12. Big Springs Country	166	44
13. Old Settlement Playgrounds	194	95
14. Delta Area	65	14
State	3573	1362

Source: Missouri Recreation Survey, 1966, Statistical Summary.

TABLE XVI

[illegible] ACTIVITIES AMONGST [illegible] AND RETAILERS,
BY [illegible] AND TRADES, BY STATES AND DIVISIONS, RECENSUS: 1960

	State as a Whole	1 Army Engineers	2 Queen Silica	3 Mark Textile	4 Kenova City Area	5 Old Textile Area	6 Central Business	7 Land of the Longs	8 Lake of the Hearths	9 Cantonal Counties	10 Metropolitan Ft. Lewis	11 White Slave	12 Big Egg Wings	13 Old Settlement	14 Delta Area
Banks:															
Flag Field	4,672	218	106	141	1,245	306	312	334	84	746	2,142	479	641	748	123
Retailing Reach	2,164	17	3	36	11	149	117	9	439	71	194	1,025	178	33	2
Retailing Food City, Ft.J	1,334,153	54,304	44,000	17,471	135,665	47,225	37,471	17,479	37,192	43,112	512,536	134,734	74,137	438,150	71,398
Stocks	12,761	340	279	439	1,119	671	1,594	567	259	1,592	2,112	1,178	592	921	130
Dept Stores	2,179	17	10	76	12	21	331	12	349	241	174	719	189	149	19
Text Imaging	3,459	12	31	77	74	43	72	44	431	171	141	549	174	459	4
Textiles Imaging	1,351	4	4	47	14	25	74	11	27	43	21	729	165	211	3
Cotton and Retail	2,749	4	1	71	41	5	65	41	247	121	11	349	159	142	3
Retail and Lodge	149	2	2	1	6	2	12	1	4	8	3	71	61	29	3
Banking Restrictions	1,174	14	11	141	141	124	141	117	411	174	171	241	61	141	114
Group Imaging	1,149	11	31	114	141	151	171	151	121	41	41	11	471	1,471	11
Ice Skating	1,114	114	4	151	71	11	11	11	1	11	11	1	1	11	1
Ski Slope	17	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Video Retail	117	1	1	11	11	1	11	1	1	1	11	11	1	1	1
Marina	111	11	1	11	11	1	1	1	11	1	111	11	1	1	1
Golf Courses	1,114	411	171	171	411	171	141	411	411	111	1,141	111	411	411	141
Others	11,111	111	111	111	1,111	1,111	111	111	1,111	111	111	1,111	1,111	111	11
	31,111/	1,111	111	1,111	1,111	1,111	1,111	1,111	1,111	1,111	1,111	1,111	1,111	1,111	1,111
Wines:															
Seagrass Hands	1,114	11	11	111	11	111	11	1,111	111	111	111	111	1,111	111	11
Spoiled Hands	111	1	1	1	1	11	11	1	1	1	11	11	11	11	11
Kenya Textile	111	1	1	1	11	11	11	11	11	11	11	11	11	11	11
Rust Textile	111	1	1	1	11	1	11	11	11	11	11	11	11	11	11
Bicycle Rack	111	11	11	11	11	11	11	11	11	11	11	11	1	11	11
	1,111/	11	11	111	111	111	111	1,111	111	111	111	1,111	1,111	1,111	111

1/ Mill workers in service, [illegible] people are excluded.
2/ Mill workers in action.
Source: Research Corporation Survey, 1960.

TABLE XVII

STANDARDS USED FOR CALCULATION OF CARRYING CAPACITY FOR 12 RECREATION FACILITIES

(Multipliers used to calculate demand for recreation activities: 1980, 1.5; 2000, 2.0; and 2020, 2.5 times the rate of the 1965 activity occasions.)

	Recreation Facility	Recreation Activity	Maximum Annual Activity Occasions Per Urban Standards	Rural Standard
A.	Playfields (per acre)	Playing Games	6,000	4,200
B.	Swimming Beaches and Pools (per square foot)	Swimming and Wading (per square foot)	1	0.5
C.	Picnic Areas (per acre)	Picnicking	10,800	5,760
D.	Tent Campground (per acre)	Tent Camping	2,400	1,200
E.	Trailer and Camper Ground (per acre)	Trailer Camping	1,920	1,440
F.	Group Camp (per acre)	Group Camping	625	625
G.	Marina (per acre)	Canoeing, Sailing and all Other Boating	9,792	9,792
H.	Horse Trail (per mile)	Horseback Riding	7,200	5,000
I.	Foot Trails (per mile)	Hiking	1,000	100
J.	Bike Trails (per mile)	Biking	10,000	1,000
K.	Hunting Grounds (per acre)	Hunting, Small, Big Game and Waterfowl Taken Together	0.10	0.10
	1. Lands managed by the Missouri Conservation Department, U.S. Forest Service, U.S. Fish & Wildlife Service		0.10	0.10
	2. All other lands (including private) which indicate hunting is available(as one of the three ranked or checked activities)		0.05	0.05
L.	Fishing Waters	All Types of Fishing		
	Managed Lakes and Reservoirs		35.0	35.0
	Unmanaged Lakes and Reservoirs		15.0	15.0
	Streams (per mile)		15.0	15.0

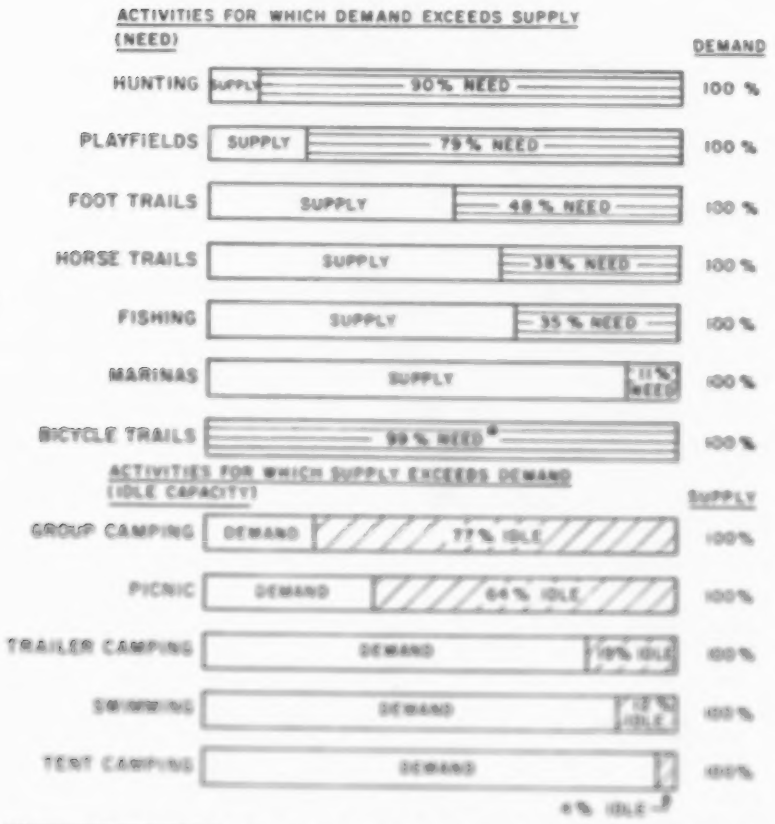
TABLE XVIII

CALCULATION OF PRESENT AND FUTURE NEEDS--STATE AS A WHOLE
(In Millions of Activity Occasions)

Facilities and Activities	1965 Demand	1965 Supply	1965 Need or Idle -	1965 Need or Idle +	1980 Demand	1980 Supply	1980 Need or Idle -	1980 Need or Idle +	2000 Demand	2000 Supply	2000 Need or Idle -	2000 Need or Idle +	2020 Demand	2020 Supply	2020 Need or Idle -	2020 Need or Idle +
Facilities and Resources Having Standards																
Playfield	163.4	34.9	-	128.5	283.5	36.8	-	246.7	492.5	36.8	-	455.6	728.5	36.8	-	691.7
Swimming	52.2	61.6	+	9.4	90.7	62.5	-	28.2	157.5	62.5	-	95.0	232.9	62.5	-	170.4
Picnicking	25.0	63.9	+	40.9	39.9	67.8	+	27.8	69.4	67.8	-	1.6	102.6	67.8	-	34.9
Camping: Tent	3.3	3.9	+	0.1	6.6	4.8	-	1.8	11.5	4.8	-	6.7	17.0	4.8	-	12.2
Trailer	1.5	1.9	+	0.4	2.7	2.4	-	0.3	4.6	2.4	-	2.3	6.9	2.4	-	4.5
Group	0.7	3.2	-	2.4	1.3	3.2	+	1.9	2.2	3.2	+	1.0	3.3	3.2	-	0.1
Marina	3.5	3.2	-	0.4	6.2	3.5	-	2.6	10.7	3.5	-	7.2	15.8	3.5	-	12.3
Trails: Horse	7.5	4.6	-	2.9	12.9	5.2	-	7.8	22.5	5.2	-	17.3	33.5	5.2	-	28.1
Foot	1.8	0.9	-	0.8	3.1	1.0	-	2.1	5.4	1.0	-	4.3	8.0	1.0	-	6.9
Bike	135.6	0.01	-	135.6	235.3	0.01	-	235.3	408.8	0.01	-	408.7	604.7	0.01	-	604.5
Hunting	2.2	0.2	-	2.0	3.8	0.2	-	3.6	6.7	0.2	-	6.5	9.9	0.2	-	9.7
Fishing	24.7	16.1	-	8.6	42.8	16.1	-	26.7	74.3	16.1	-	58.2	109.9	16.1	-	93.9
Total	419.9	194.4	-	325.6	728.8	203.5	-	525.3	1,965.1	205.5	-	1,062.6	1,872.8	205.5	-	1,669.3
Activities Having No Standards For Comparison																
Water Skiing	2.2				5.5				9.6				14.2			
Mountain Climbing	0.1				0.2				0.3				0.5			
Walking for Pleasure	63.0				109.4				189.9				281.0			
Bird Watching	7.4				12.9				22.3				33.0			
Wildlife and Bird Photography	0.3				0.5				0.9				1.4			
Driving for Pleasure	51.0				88.4				152.2				240.0			
Sight-seeing	34.4				60.1				93.8				138.7			
Attending Sport Events	23.0				39.9				69.2				102.4			
Attending Concerts	3.3				5.8				10.0				14.8			
Ice Skating	0.2				0.4				7.6				11.3			
Snow Skiing	0.1				0.2				0.4				0.6			
Sledding and Tobogganing	0.2				35.0				20.1				29.8			
Other	0.3				0.5				0.9				1.3			
Total Demand by Local Pop.	607.4				1,084.4				1,880.0				2,760.3			
Satisfied Out-of-State[1]	<41.0				<205.0				<205.0				<205.0			
Demand by Out-of-Staters[2]	+71.2				+144.0				+294.0				+384.0			
Total Observed Demand	637.6				1,023.4				1,969.0				2,938.3			

(Sources: National Recreation Survey, 1960, Statistical Summary.
(Note: Totals do not add up due to rounding of figures.
[1] Estimated as approximately 10 percent of the total demand.
[2] Computed as desired for 1980, higher for 2000, and unchanged for 2020.

COMPARATIVE TABLE OF PRESENT DEMAND AND SUPPLY
STATE OF MISSOURI — 1965



* The indicated need for bicycle trails is greatly overstated. At the present time, most of the bicycling takes place on sidewalks in cities and towns. An inventory of the sidewalk mileage was not feasible during this study and the "need" indicated is excessive—as demand was compared only with existing bicycle trails. About 40 percent of the "need" for bicycle trails will always be satisfied by the existing sidewalk system, the remaining 60 percent is divided between (1) designated bicycling streets leading to parks or recreation areas, (2) abandoned roads, and (3) canal, creek, stream, and river banks. See Bike Trails and Facilities, American Institute of Park Executives, Inc., by Walter Cook, May, 1965.

Figure 11

SWIMMING NEED, BY STATE AND BY REGIONS

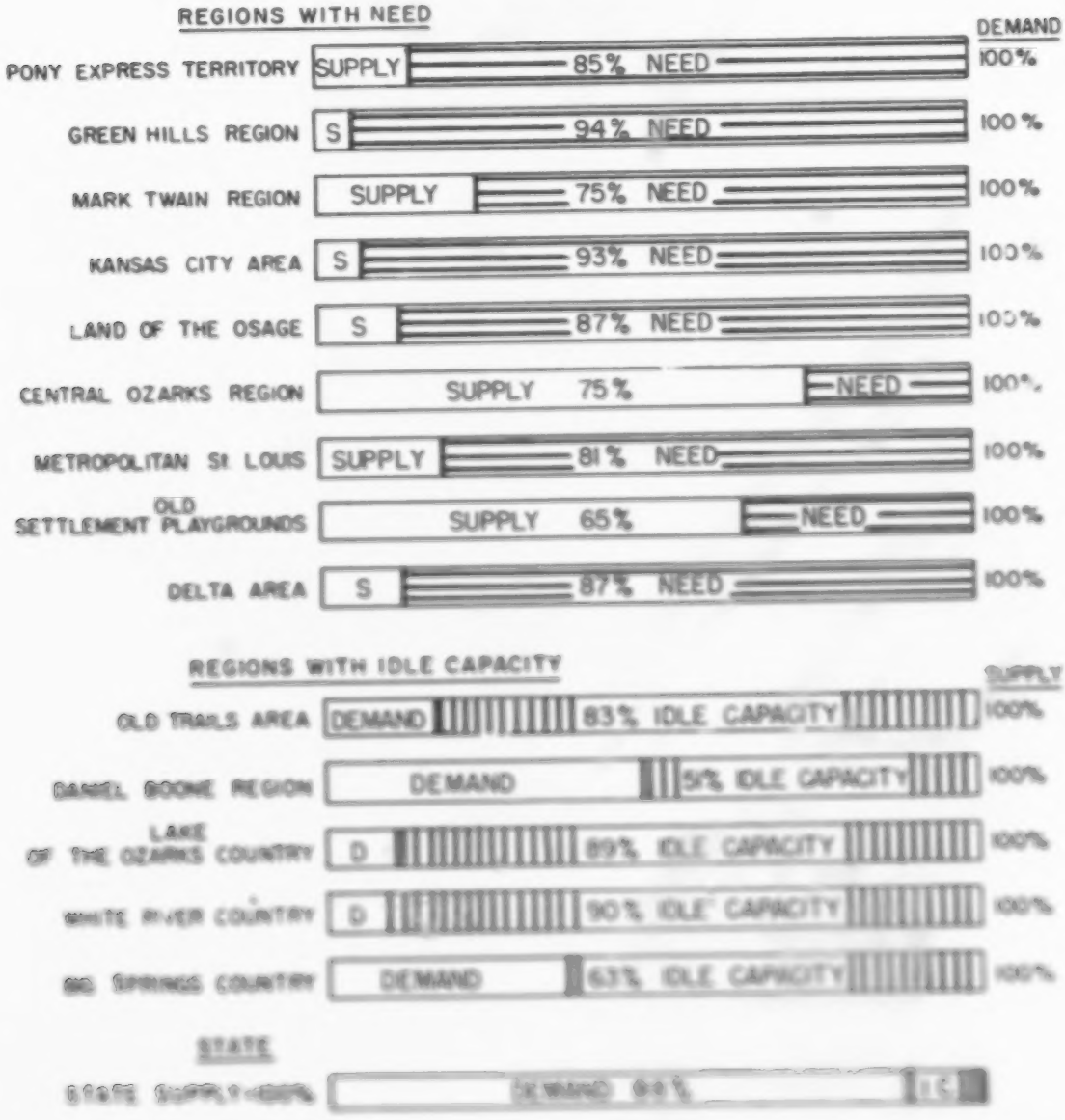


Figure 12

FISHING NEED, BY STATE AND BY REGIONS

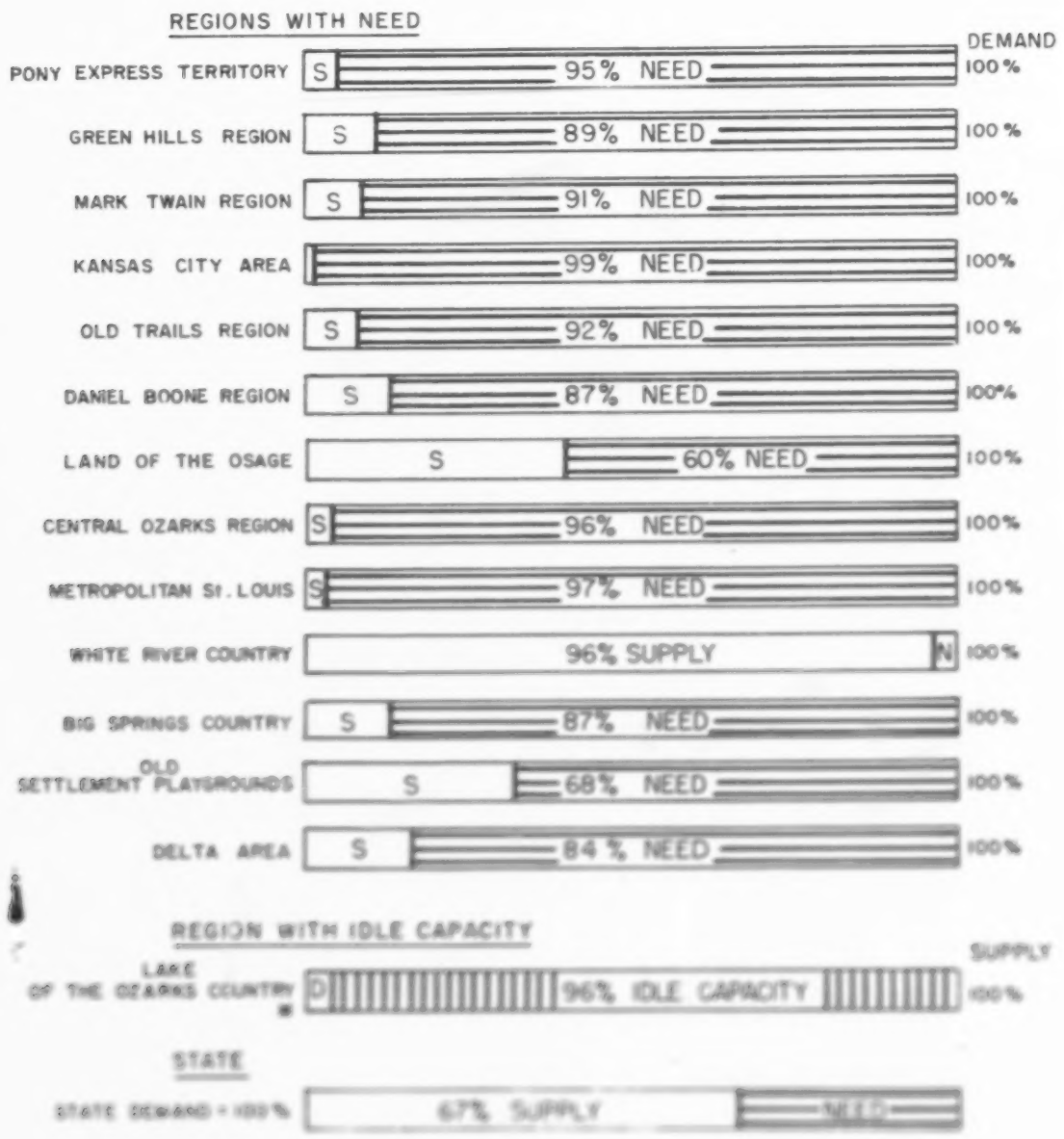


Figure 13

ACTION PROGRAM

The Outdoor Recreation Resources Review Commission recommended that each state, through a central agency, prepare a long range plan for outdoor recreation. Missouri has created a central agency--State Inter-Agency Council for Outdoor Recreation--prepared a preliminary outdoor recreation plan, and now has this long range plan upon which planning, acquisition, and development of outdoor recreation resources can be based.

Resources for outdoor recreation have special importance to the people of Missouri. These resources contribute not only to the well-being of the citizens but also to the state's growth and economic development. And out-of-state visitors add much to the state's income.

Missouri has natural resources for recreation that are more than adequate to serve its own population's, and its visitors', recreation desires in most instances. But the record indicates that continuing effort is necessary if these resources are to meet the ever-growing demands of the local residents and out-of-state visitors. Of growing importance, too, is the quality of resources.

The findings of the State Comprehensive Outdoor Recreation Plan focus on a number of problem areas in meeting the present and future needs and demands of both in-state and out-of-state outdoor recreationists. Toward overcoming these problems, it is recommended that:

- The State (1) expand its programs for acquiring recreation acreages--to include sufficient land for at least 50 years of expansion; (2) expand its recreation facilities development programs; and (3) enter into arrangements with other public and private bodies to provide both high quality and greater quantities of outdoor recreation resources, convenient to population centers.

- Public agencies acquire and reserve water-oriented acreages, shorelines, and related land resources and construct the greatly needed swimming pools in and near major urban centers.

- Urban areas plan and act to acquire more open space areas and utilize public agency regulatory power to zone areas for recreation development.

* Legislative actions be taken to create incentives to open private land for public recreation use.

* The Inter-Agency Council for Outdoor Recreation seek to stimulate private investment in recreation development within the state.

* Local governments establish and maintain recreation areas for the blind and other physically and mentally handicapped persons.

* The state institute a continuing outdoor recreation planning program. The program should include updating of information on trends in recreation and changes in socio-economic characteristics of the population and a continuing inventory of recreation facilities and areas in Missouri. The program should also incorporate short and long term plans for financing outdoor recreation resource development, with an increased emphasis on regional needs.

POSTSCRIPT

THE MEANING BEHIND THE NUMBERS

Recreation planning, to be effective, must utilize the best in available electronic data processing tools. Nearly 10 million bits of numerical data were processed by computer means in a systematic manner, and the results are contained in the three volumes of the Statistical Summary to the Plan. But even though numbers were used to grapple with the complexities of recreation demand and supply...need and idle capacity, the consistent aim was to present the meaning behind the numbers.

That meaning is best expressed as a striving to create, for Missouri residents, the means to obtain a quality environment for recreation. The numbers reflect the quiet solitude of a creek winding between rolling hills...untouched land for a scenic campsite...a colorful playground brimming with happy children...the dull thud of horses' hoofs on turf...the crack of sails over a sparkling, restless lake...the churning turmoil of a bass struggling with the lure...

Behind the economic jargon is the reality it attempts to express. That reality is best shown in the photographs used for illustration in this Executive Summary. They more nearly represent the ultimate goals of the Plan than the tools used to measure and delineate the subject. Tools are valuable. But statistics, computers, and economic theory all ultimately work to serve human values, aspirations, and ideals. If these were served by this study, it will have fulfilled its purpose.

Picture Credits:

Missouri Department of Conservation -- Front Cover, Supply Title Page
Missouri State Park Board -- The Setting, The Outdoor Recreation Survey, and Demand Title Pages and Back Cover
Missouri Highway Department -- Summary and Introduction and Action Program Title Pages

APPENDIX

OUTDOOR RECREATION ACTIVITY DEFINITIONS

BICYCLING	Bicycle or motorcycle riding done only for pleasure. (Not included if used for going to work or school.)
HORSEBACK RIDING	Includes horseback or buggy riding for pleasure.
PLAYING OUTDOOR GAMES OR SPORTS	Both team-play and individual play are included--emphasis on active participation. Target and trapshooting are included in this category.
FISHING	The taking of fish for noncommercial purposes. Spearfishing and archery fishing are included. Fishing for commercial purposes or other "nonsport" fishing not included.
CANOEING	The dictionary defines a canoe as a narrow, light boat moved with paddles, not oars. Any recreation use of such craft is "canoeing."
SAILING	Recreation use of any vessel with sail primarily intended to be propelled by wind. Sailboats with auxiliary engines, or sailing dinghies equipped with sail, if primarily intended to be sailed rather than propelled by other means, are included.
OTHER BOATING	Use of any boat other than canoes or sailboats is included here, with the exception of houseboats. This category includes rowboats, outboard motorboats, rafts, inboard motorboats, floats, etc.
SWIMMING	Ability to swim is not necessary for inclusion under this activity. "Bathing," playing in the surf, etc., is included as well as skin or scuba diving and surfboarding.

WATER SKIING	Includes any of the various sports where the person is towed behind a boat--aquaplanes, water skis, or any other similar apparatus.
HUNTING	The search for or stalking of animals in order to kill them for recreation purposes. No form of commercial hunting is considered.
CAMPING	Living out of doors using for shelter a bedroll, sleeping bag, trailer, tent, or a hut open on one or more sides, if the person takes his bedding, cooking equipment, and food with him.
MOUNTAIN CLIMBING	Climbing a mountain, or rocks, with gear.
HIKING	Limited to hiking on trails, with pack. A pack normally includes provisions and some type of shelter.
WALKING FOR PLEASURE (Inside urban areas)	Any walking not included under hiking or nature walks.
BIRD WATCHING	Restricted to bird watching, exclusively.
WILDLIFE & BIRD PHOTOGRAPHY	Only wildlife and bird photography are considered.
NATURE WALKS	Includes walks for the purpose of observing plants, birds, or animals, and the collection of specimens, photographing natural subjects, etc.
PICNICS	A picnic is outdoor activity away from home, the primary purpose being the preparation or eating of a meal out-of-doors.
DRIVING FOR PLEASURE	Both driving and riding for pleasure. Weekend trips, vacation trips are included.

SIGHT-SEEING	Intentional viewing something of interest, natural or otherwise, out-of-doors. (Window-shopping in business districts is excluded.)
ATTENDING OUT-DOOR CONCERTS	Musical, dramatic, artistic, or other nonsporting (passive) outdoor activities. Drive-in movies are excluded.
ICE SKATING	Noncompetitive recreation ice skating only.
SNOW SKIING	Skiing done on snow or ice.
SLEDDING OR TOBOGGANING	Snow or ice related activity requiring a sled or toboggan.